

information that completes said one of broadcast programming and cablecast programming.

#### Please cancel claims 53-72.

#### II. REMARKS

Applicants submit the foregoing claim amendments and cancellations for the purpose of expediting prosecution of the instant application. Specification support from the instant disclosure and applicants' 1981 priority disclosure is provided in Appendix B for all claims pending in this application as amended. No new matter is added by the foregoing amendments.

Applicants wish to call to the Examiner's attention the fact that claims 43-52 of the instant application are based on claims 2-4 and 16-22 of application serial number 08/972,980 ("the '980 application"). The '980 application was allowed on September 21, 1998, and the issue fee was paid on October 26, 1998. However, the '980 application was withdrawn from issue by the PTO on November 4, 1999, based on the alleged unpatentability of one or more claims. No further reason for the withdrawal beyond this allegation was provided.

Before the '980 application was withdrawn from issue, applicants filed on August 5, 1999, a submission under 37 C.F.R. § 1.312. The August 5, 1999 submission provided a detailed explanation as to why the '980 application should be permitted to issue.

Included in that submission were specification support tables containing detailed citations

to applicants' 1987 and 1981 disclosures for each pending claim. In the withdrawal letter of November 4, 1999, no comment of any kind was made as to the support tables.

As part of applicants' agreement with the PTO to consolidate applicants' copending applications, the '980 application was expressly abandoned on May 23, 2000, and the claims of the '980 application were added to the instant application. Over one year later, applicants received a PTO communication dated September 21, 2001 in the expressly abandoned '980 application asserting that applicants' August 5, 1999 submission was non-responsive.

Applicants respectfully submit that the September 21, 2001 communication in the '980 application fails to provide any legitimate basis as to why applicants' August 5, 1999 submission was in any way improper. In particular, the September 21, 2001 communication offers no explanation as to why applicants' detailed specification support tables are insufficient to establish that the claims that were pending in the '980 application were supported by both the 1987 and 1981 specifications.

Applicants submit that the support tables submitted in the August 5, 1999 submission plainly demonstrate that the claims of the '980 application were supported by the 1987 and 1981 disclosures. Applicants have therefore incorporated the content of the August 5, 1999 tables into the tables attached as Appendix B for those claims of the instant application which are based on claims of the '980 application. The tables attached as Appendix B demonstrate that all of the claims of the instant application are supported by the 1987 and 1981 disclosures.

### III. CONCLUSION

Applicants respectfully request consideration of the foregoing amendments and allowance of the instant application is respectfully requested.

If the Examiner has any remaining informalities to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned attorney for a telephone interview to discuss resolution of such informalities.

Respectfully submitted,

Date: March 1, 2002

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## Appendix A

Applicants' Marked-Up Claim Language

2. (**Four Times Amended**) A method for [providing a function at] reprogramming a receiver station that receives television or radio programming, said receiver station having a data network connection, a processor, an input device, and a data storage device, said method comprising the steps of:

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[receiving, at said receiver station, from said input device a set of information collection parameters, each of which is separately inputtable through said input device;] storing [the set of information collection parameters] <u>first operating instructions</u> at said receiver station;

generating a query [from said set of information collection parameters stored] at said receiver station, said query comprising a request by said receiver station for reprogramming;

promulgating said query from said receiver station through said data network connection to a data network;

receiving <u>second</u> operating instructions in response to said step of promulgating
[a] <u>said</u> query; and

storing said <u>second</u> operating instructions at said data storage device at said receiver station.

3. (Twice Amended) The method of claim 2, further comprising the steps of:

processing or outputting information on the basis of said <u>first and second</u> operating instructions at said receiver station;

storing a data record evidencing said step of processing or outputting; and transferring said data record from said step of processing or outputting from said receiver station <u>data</u> storage device to a data collection station in said data network through said data network connection.

4. (Unchanged) The method of claim 2 wherein said data network connection is a telephone interface connection.

5. (Three Times Amended) A method for providing and tracking a receiver station's use of a function in a data network at a data collection station, said receiver station having a data network connection, a processor, an input device, and a data storage device, said data network having a plurality of data information sources, said method comprising the steps of:

providing operating instructions or executable code to a plurality of receiver stations from said plurality of data information sources;

performing said function based on said operating instructions or <u>said</u> executable code at said receiver station;

recording an identification of said performed function at said data storage device at said receiver station; and

transferring said record of identification to [a] said data collection station on said data network through said receiver station data network connection.

- 6. (Amended) The method of claim 5, wherein said receiver station <u>data</u> network connection is a telephone network connection.
- 7. (Amended) The method of claim 5, wherein said function in said step of performing [a] said function is a series of numerical functions performed on a computer.
  - 8. (Cancelled.)
  - 9. (Cancelled.)

(Cancelled.) 10. 11. (Cancelled.) 12. (Cancelled.) (Cancelled.) 13. 14. (Cancelled.) 15. (Cancelled.) 16. (Cancelled.) 17. (Cancelled.) (Cancelled.) 18. (Cancelled.) 19. 20. (Cancelled.) 21. (Cancelled.)

22.

(Cancelled.)

(Cancelled.) 23. 24. (Cancelled.) 25. (Cancelled.) 26. (Cancelled.) 27. (Cancelled.) 28. (Cancelled.) 29. (Cancelled.) 30. (Cancelled.) 31. (Cancelled.) (Cancelled.) 32. 33. (Cancelled.) 34. (Cancelled.) (Cancelled.) 35.

(Cancelled.)

36.

- 37. (Cancelled.)
- 38. (Cancelled.)
- 39. (Cancelled.)
- 40. (Cancelled.)
- 41. (Cancelled.)
- 42. (Cancelled.)
- 43. (Amended) A method of delivering one of broadcast programming and cablecast programming to a subscriber in a communications network, said communications network including a transmitter station and a receiver station, said transmitter station being capable of communicating a processor control signal associated with said one of broadcast programming and cablecast programming, said receiver station having an input device for inputting subscriber information, a processor for storing and processing subscriber data in response to said processor control signal, a communications device for transmitting information to a remote site, and an output device for displaying a television program, said method comprising the steps of:

displaying said television program at said output device;

inputting a command at said input device;

communicating, from said receiver station to said transmitter station, an event signal based on said command inputted at said receiver station;

transmitting, from said transmitter station to said receiver station, operating instructions associated with said <u>one of broadcast programming and cablecast</u> programming, in response to said event signal communicated from said receiver station;

one of programming and reprogramming <u>said receiver station</u>, on the basis of said transmitted operating instructions, [said receiver station] to respond in a predetermined fashion to said processor control signal;

receiving, at said receiver station, said processor control signal;

processing, at said receiver station, said processor control signal; and

causing said receiver station to receive and output said one of broadcast

programming and cablecast programming in accordance with said processor control signal.

- 44. (Unchanged) The method of claim 43, wherein said command is a subscriber reaction to said television program.
- 45. (Amended) The method of claim 43, wherein said event signal communicated from said <u>receiver</u> station comprises a customer order for said <u>one of broadcast programming and cablecast programming</u>.
- 46. (Unchanged) The method of claim 43, wherein said received and processed processor control signal is an instruct-to-tune signal that causes a receiver to receive a selected transmission.
- 47. (Unchanged) The method of claim 43, wherein said received and processed processor control signal is an instruct-to-activate signal that controls a switch or inputs power to an apparatus.

- 48. (Amended) The method of claim 43, wherein said received and processed processor control signal is an instruct-to-enable signal that causes a transfer device to transfer a signal to [an] said output device.
- 49. (Unchanged) The method of claim 43, wherein said received and processed processor control signal is an instruct-how-to-decrypt signal that controls a decryptor.
- 50. (Unchanged) The method of claim 43, wherein said received and processed processor control signal is an instruct-to-coordinate signal that coordinates a multimedia presentation.
- 51. (Amended) The method of claim 43, wherein said received and processed processor control signal is an instruct-to-generate signal that generates information that supplements said <u>one of broadcast programming and cablecast programming</u>.
- 52. (Amended) The method of claim 43, wherein said received and processed processor control signal is an instruct-to-generate signal that generates information that completes said <u>one of broadcast programming and cablecast</u> programming.
  - 53. (Cancelled.)
  - 54. (Cancelled.)
  - 55. (Cancelled.)

(Cancelled.) 56. 57. (Cancelled.) 58. (Cancelled.) 59. (Cancelled.) 60. (Cancelled.) 61. (Cancelled.) 62. (Cancelled.) 63. (Cancelled.) 64. (Cancelled.) 65. (Cancelled.) 66. (Cancelled.) 67. (Cancelled.)

(Cancelled.)

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- 69. (Cancelled.)
- 70. (Cancelled.)
- 71. (Cancelled.)
- 72. (Cancelled.)

## Appendix B

# Specification Support from the Instant Disclosure and Applicants' 1981 Priority Disclosure

Instant Specification	Language
	Reference
Priority U.S. Pat. No. '490	Language
'Applicants'	Reference
Claim Language of	Instant Application

through 4E, signal processors, 100, 103, 106, 109, and 112, could also operate in a predetermined fashion and telephone a remote site to get an additional signal or signals necessary for the proper decryption and/or transfer of incoming programing transmissions.
At each station where a match fails to occur—which suggests that the preprogrammed SPAM operating information of said station has been tampered with in an unauthorized fashion  — each station where a match fails to occur—which indicates that a decryptor, 224, is not decrypting its received information correctly  Page 301 lines 6-9.  Page 308 line 35 to At each station where a match does not page 309 line 3.  The controller, 20] is interactive with external sources via telephone connection, external sources via telephone connection, causes said dialer, 24, to dial said number. Said first computer answers said telephone call, and in a fashion well known in the art, controller, 20, and said first computer automatically establish telephone automatically establish telephone
Page 293 lines 32-35.

Instant Specification	Language	signal via connection, 22, to controller, 20.	Fig. 2 shows one embodiment of a signal processor. Said processor, 26, is configured for simultaneous use with a cablecast input that conveys both television and radio programming and a broadcast television input.	Said detection-complete information causes controller, 20, to cause oscillator, 6, to cause the selection of the next channel in the predetermined television channel selection pattern: wireless channel 9. Automatically oscillator, 6, causes mixer, 3, to select the frequency of channel 9 and input said frequency of interest, at a fixed frequency, to decoder, 30  Controller, 20, has capacity for keeping track of elapsed time, and after determining in a predetermined fashion that a particular predetermined period of time has elapsed from the input of wireless channel 9 to decoder, 30, controller, 20, causes oscillator, 6, to cause the selection of the next channel in the predetermined television channel selection pattern: wireless channel 13.	Said radio-detection-complete information causes controller, 20, to cause oscillator, 6, to cause the selection of the next frequency in the predetermined radio frequency selection pattern: 99.0 MHz. Automatically oscillator, 6, causes mixer, 2, to select said frequency and input it, at a fixed frequency, to decoder, 40  After determining, in a predetermined fashion, that a particular predetermined period of time has elapsed from the input of said 99.0 MHz frequency to decoder, 40, controller, 20,
	Reference	See "Data Transfer Network" in Fig. 2.	Page 29 lines 4-7.	Page 257 line 24 to page 258 line 19.	Page 265 line 27 to Page 266 line 21.
Applicants' Priority U.S. Pat. No. '490	Language		A signal processor apparatus for simultaneous use with a cablecast input that conveys both television and radio programing and a broadcast television input is shown in Figure 1.	The local oscillator, being thus sequenced, will allow each signal decoder, 30 and 40, to receive a particular frequency at a particular time interval.	
Applicants	Reference	See "Data Transfer Network" in Fig. 1.	Column 6 lines 23-26.	Column 9 lines 53-55.	
Claim Language of	Instant Application		a processor,	an input device,	

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Instant Specification  Language	causes oscillator, 6, to cause the selection of the next frequency in the predetermined radio frequency selection pattern: 100.0 MHz.	Buffer/comparator, 8, receives said signals from said decoders and other signals from other inputs and organizes the received information in a predetermined fashion.  Each decoder is controlled by a controller, 39, 44, or 47, that has buffer, microprocessor, ROM, and RAM capacities. Said buffer capacity of controller, 39, 44, or 47, includes capacity for organizing, inputs	[The apparatus] has a read only memory for recording permanent operating instructions and other information and a programmable random access memory controller ("PRAM controller") that permits revision of operating patterns and instructions.	In the present invention, particular signal processing apparatus (hereinafter called the "signal processor") detect signals and, The scanners/switches, working in parallel or series or combinations, transfer the transmissions to receiver/decoder/detectors that identify signals encoded in programming transmissions and convert the encoded signals to digital information; decryptors that may and one or more processor/monitors and/or buffer/comparators that organize and transfer the information stream. The processors and buffers can have inputs from each of the receiver/detector lines and evaluate information continuously. From the processors and buffers, the signals may be transferred to external equipment such as computers,
Reference		Page 30 lines 7-9.  Page 36 line 32 to page 37 line 3.	Page 16 lines 6-10.	Page 15 lines 7-31.
Applicants' Priority U.S. Pat. No. '490  Ce Language		Buffer/comparator, 8, organizes the data stream that it receives according to a predetermined fashion	[The apparatus] has a read only memory for recording permanent operating instructions and other information and a programmable random access memory controller ("PRAM controller") that permits revision of operating patterns and instructions.	Signal processor, 112, receives, evaluates, and processes a multiple channel transmission from cable transmission facility, 113.
Applicants Reference		Column 7 lines 36-37.	Column 5 lines 16-20.	Column 14 lines 39-41.
Claim Language of Instant Application		and a data storage device, said method comprising the steps of:		receiving, at said receiver station, from said input device a set of

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Instant Specificati		In example #7, the intermediate station that retransmits "Wall Street Week" program information to the subscriber station of Fig. 4 is a cable television system head end (such as the head end of Fig. 6).	In the interval between said commenceenabling time and said 8:30 PM time, said head end is caused, to transmit a particular enabling SPAM message that consists of enable-CC13 instructions and particular enable-WSW instructions that include particular enable-WSW-programming information, on the frequency of said master control channel. (Hereinafter said message is called the "local-cable-enablingmessage (#7).")	transmitting said SPAM message causes signal processor, 200, at decoder, 30, (to which said master control channel is inputted), to detect the information of said message,	In example #7, the controller, 20, of the signal processor, 200, of Fig. 4 is preprogrammed at a particular time with particular information that indicates that the subscriber of said station wishes to view said "Wall Street Week" program when transmission of said program on cable cable	particular master cable control channel (that may or may not be cable channel 13) from the multi-channel cable system	Executing said 1st-stage-enable-WSW-program instructions causes controller, 20, in the predetermined fashion of said instructions, to affect a first stage of decrypting the video information of the "Wall Street Week" program transmission.
	Keterence	289 lines 12-15.	Page 291 lines 9-24	Page 289 lines 22-27	·	Page 290 lines 28-29	
J.S. Pa	Language		The signals that enable the decrypter/interrupter, 101, to decrypt and/or transfer programing uninterrupted may be embedded in the programing or may be elsewhere.				
Applicants' Priority L	Kererence		Column 13 lines 17-20.				
Claim Language of	instant Application		information collection parameters,				

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Claim Language of Instant Application	Applicant Reference	Applicants' Priority U.S. Pat. No. '490 ce Language	Reference	Instant Specification Language
			Page 299 lines 19-22.	Automatically, controller, 20, causes matrix switch, 258, to transfer the information of the aforementioned video output inputted from said tuner, 215, to the output that outputs to decryptor, 224,
	Column 15 lines 1-4.	If signal processor, 112, can identify, processes, and transfer the needed signal or signals, decryptor/interruptor, 115, can decrypt and/or transfer the incoming transmission from box, 114, satisfactorily.	Page 291 lines 21-32.	In the fashions described above, so transmitting said SPAM message causes signal processor, 200, at decoder, 30, (to which said master control channel is inputted), to detect the information of said message, select the information of the execution segment in said message, and determine that said selected information matches the aforementioned instance of enable-next-program-on-CC13 information at said particular controlled-function-invoking information location. So determining a match causes the control processor, 391, to execute particular preprogrammed transfer-thismessage-to-controller-20 instructions that are associated with the instance of information at said particular location.
			Page 294 lines 28-35.	Resulting in a match causes controller, 20, to execute a particular portion of said enable-CC13 instructions.  Executing the instructions of said portion causes controller, 20, in the predetermined fashion of the said portion, to cause selected apparatus of the station of Fig. 4 to receive the cable channel 13 transmission, to cause selected apparatus to decrypt the audio portion of said transmission,
	Column 14 lines 10-17.	Fig. 4C illustrates a configuration that permits a method that provides a signal or signals to signal processor, 106, prior to decryption	Page 291 lines 9-24.	In the interval between said commence-enabling time and said 8:30 PM time, said head end is caused, in a predetermined fashion, to transmit a particular enabling SPAM message that consists of enable-CC13 instructions and

Language of	Applicants	nts' Priority U.S. Pat. No. '490		Instant Specification
t Application	Reference	Language	Reference	Language

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Instant Specification		alternate contact of switch, 1, (that is not shown in Fig. 2). Automatically, controller, 20, causes switch, 1, to connect to said third contact, thereby inputting said information to mixer, 3; and causes mixer, 3, (by control transmission means via oscillator, 6) to transfer said information without any modification; causes the control processor, 391, of decoder, 30, to cause the filter, 31, and modulator, 32, to transfer said information without any modification; causes said control processor, 391, to cause digital detector, 38, to commence inputting detected information to controller, 39; and causes said control processor, 391, to commence waiting to receive the header information of a SPAM message.  10-21.  In due course, but still before said 8:30 PM time, said program originating studio embeds in the video portion and transmits particular SPAM check information that is not a SPAM message and consists only of a particular check sequence of binary information is called the "1st- WSW-decryption-check (#7).")  Receiving the binary information of said check sequence at decoder, 30, causes digital detector, 38, to detect said information and causes control processor, 391, to	Vio Signal processor, 200, is preprogrammed with information that identifies each cable and over-the-air (hereinafter, "wireless") transmission or frequency in the locality of the subscriber station of Fig. 3 as well as the standard broadcast and cablecast practices that apply on said transmissions and frequencies In a predefermined fashion controller 200
	Reference	Page 300 lines 10-21.	Page 248 line 17 to page 249 line 5.
Priority U.S. Pat. No. '490	Language		The controller, 20, is programed to sequence the local oscillator, 6, to select each desired frequency for a specific time interval in accordance with a predetermined pattern. This pattern may be selected in accordance with standard broadcast and cablecast practices known to exist on that transmission line or frequency.
Applicants' Priority [	Reference		Column 9 lines 47-57.
Claim Language of	Instant Application		each of which is separately inputtable through said input device;

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Instant Specification	Language	oscillator, 6, in the pattern: cable channel 2, cable channel 4, cable channel 7, cable channel 13, wireless channel 5, wireless channel 9, wireless channel 13, then to repeat said pattern.  Said detection-complete information causes controller, 20, to cause oscillator, 6, to cause the selection of the next channel in the	predetermined television channel selection pattern: wireless channel 9. Automatically oscillator, 6, causes mixer, 3, to select the frequency of channel 9 and input said frequency of interest, at a fixed frequency, to decoder, 30  Controller, 20, has capacity for keeping track of elapsed time, and after determining in a predetermined fashion that a particular	predetermined period of time has elapsed from the input of wireless channel 9 to decoder, 30, controller, 20, causes oscillator, 6, to cause the selection of the next channel in the predetermined television channel selection pattern: wireless channel 13.	Said detection-complete information causes controller, 20, to cause oscillator, 6, to cause the selection of the next channel in the predetermined television channel selection pattern: wireless channel 9. Automatically oscillator, 6, causes mixer, 3, to select the frequency of channel 9 and input said frequency of interest, at a fixed frequency, to	Controller, 20, has capacity for keeping track of elapsed time, and after determining in a predetermined fashion that a particular predetermined period of time has elapsed from the input of wireless channel 9 to decoder, 30, controller, 20, causes oscillator, 6, to cause	the selection of the next channel in the
	Reference	Page 257 line 24 to page 258 line 19.			Page 257 line 24 to page 258 line 19.		
Applicants' Priority U.S. Pat. No. '490	1 1	·	·		The local oscillator, being thus sequenced, will allow each signal decoder, 30 and 40, to receive a particular frequency at a particular time interval.		
Applicants	Reference						
Claim Language of	Instant Application						

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Instant Specification  Language	pattern: wireless channel 13.	Said radio-detection-complete information causes controller, 20, to cause oscillator, 6, to cause the selection of the next frequency in the predetermined radio frequency selection pattern: 99.0 MHz. Automatically oscillator, 6, causes mixer, 2, to select said frequency and input it, at a fixed frequency, to decoder, 40  After determining, in a predetermined fashion, that a particular predetermined period of time has elapsed from the input of said 99.0 MHz frequency to decoder, 40, controller, 20, causes oscillator, 6, to cause the selection of the next frequency in the predetermined radio frequency selection pattern: 100.0 MHz.	Example #5 begins with the embedding and transmitting, at the remote station that originates the "Wall Street Week" broadcast, of the first message of the "Wall Street Week" program which is the message of the first combining synch command.	Receiving said embedded information causes the binary SPAM information of said first command, with error correcting information, to be detected at detector, 34;	said information to radio decoder, 42, which decodes the the embedded signal information of said command and transmits said signal information to digital detector, 43, which detects the binary information with error correcting bit information of said command and transfers said binary and bit information to controller, 44.	In each decoder, the controller, 39, 44, or 47, receives detected digital information from the relevant detector or detectors, 34, 37, 38, 43,
Reference		Page 265 line 27 to Page 266 line 21.	Page 250 lines 13-17.	Page 251 lines 8-11.	Page 263 lines 19-24.	Page 37 lines 26-28.
Applicants' Priority U.S. Pat. No. '490 Language		·	This will define the timing of the composite outputs of the digital detectors, 34, 37, and 38 in FIG. 2A, and 43 in FIG. 2B.		•	
Applicants Reference						
Claim Language of Instant Application						

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Instant Specification	Language	and 46.	Decoder, 30, which is shown in detail in Fig. 2A, and decoder, 40, which is shown in Fig. 2B, detect signal information embedded in the respective inputted television and radio frequencies, and output said signals and said modified signals to buffer/comparator, 8.	Buffer/comparator, 8, receives said signals from said decoders and other signals from other inputs and organizes the received information in a predetermined fashion.	Each decoder is controlled by a controller, 39, 44, or 47, that has buffer, microprocessor, ROM, and RAM capacities. Said buffer capacity of controller, 39, 44, or 47, includes capacity for organizing, inputs	At the station of Fig. 4, the preprogrammed information of said sixteen contiguous bit locations is decryption cipher key Ba.	And for example, determining that a local station is not preprogrammed properly and/or that decryption, apparatus are not functioning correctly may cause apparatus of said station interrogate remote station apparatus, by telephone, for cipher key and/or cipher algorithm instructions and information. And for example, the transmitted programming	At each station where a match fails to occurwhich suggests that the preprogrammed SPAM operating information of said station has been tampered with in an unauthorized fashion	each station where a match fails to
~	Reference		Page 29 line 33 to page 30 line 5.	Page 30 lines 7-9.	Page 36 line 32 to page 37 line 3.	Page 298 line 33 to page 299 line 1.	Page 311 line 33 to page 312 line 8.	Page 293 lines 32-35.	
Applicants' Priority U.S. Pat. No. '490	Language		If one returns to FIG. 1, one sees that the three separate lines of information outputted from TV signal decoder, 30, are then gated to a buffer/comparator, 8, which also receives other inputs from the other separate receivers comprising similar filters, demodulators, and decoders for other channels of interest.	Buffer/comparator, 8, organizes the data stream that it receives according to a predetermined fashion		If signal processor, 112, has been preprogramed with the signal or signals	In any of the cases illustrated in FIGs 4A through 4E, signal processors, 100, 103, 106, 109, and 112, could also operate in a predetermined fashion and telephone a remote site to get an additional signal or signals necessary for the proper decryption and/or transfer of incoming programing transmissions.		
Applicants	Reference		Column 7 lines 6-11.	Column 7 lines 36-37.		Column 14 lines 54-55.	Column 15 lines 20-25.		
Claim Language of	Instant Application		storing the set of information collection parameters at said receiver station;				generating a query from said set of information collection parameters stored at said receiver station;		_

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Instant Specification		occurwhich indicates that a decryptor, 224, is not decrypting its received information correctly	5 to At each station where a a match does not resultwhich indicates that a decryptor, 224 or 231, is not decrypting its received information correctly	Controller, 20, transfers the telephone number, 1-800-AUDITOR, to auto dialer, 24, and causes said dialer, 24, to dial said number.	1-13. Controller, 20, transfers the telephone number, 1-800- CHARGES, to auto dialer, 24, and causes the dialing of said number.	sto And for example, determining that a local station is not preprogrammed properly and/or that decryption, apparatus are not functioning correctly may cause apparatus of said station interrogate remote station apparatus, by telephone, for cipher key and/or cipher algorithm instructions and information. And for example, the transmitted programming	2-35. At each station where a match fails to occurwhich suggests that the preprogrammed SPAM operating information of said station has been tampered with in an unauthorized fashion	each station where a match fails to occurwhich indicates that a decryptor, 224, is not decrypting its received information correctly	to At each station where a a match does not resultwhich indicates that a decryptor, 224 or 231, is not decrypting its received
*	Reference	Page 301 lines 6-9.	Page 308 line 35 to page 309 line 3.	Page 273 lines 6-8. utput	Page 274 lines 11-13.	1A Page 311 line 33 to page 312 line 8. In a	Page 293 lines 32-35.	Page 301 lines 6-9.	Page 308 line 35 to page 309 line 3.
Applicants' Priority U.S. Pat. No. '490				The controller, 20, also contols the automatic telephone dialing device, 24, to allow the apparatus to automatically output it our informatical in output	predetermined sequence and to change telephone numbers dialed as required.	In any of the cases illustrated in FIGs 4A through 4E, signal processors, 100, 103, 106, 109, and 112, could also operate in a predetermined fashion and telephone a remote site to get an additional signal or signals necessary for the proper decryption and/or transfer of incoming programing transmissions.			
	Reference			Column 8 lines 50-55.		Column 15 lines 20-25.			
Claim Language of	Instant Application					promulgating said query from said receiver station through said data network connection to a data network;			

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Instant Specification	Language		And for example, determining that a local station is not preprogrammed properly and/or that decryption, apparatus are not functioning correctly may cause apparatus of said station interrogate remote station apparatus, by telephone, for cipher key and/or cipher algorithm instructions and information. And for example, the transmitted programming	At each station where a match fails to occur-which suggests that the preprogrammed SPAM operating information of said station has been tampered with in an unauthorized fashion	each station where a match fails to occur-which indicates that a decryptor, 224, is not decrypting its received information correctly	At each station where a a match does not resultwhich indicates that a decryptor, 224 or 231, is not decrypting its received information correctly	Automatically, controller, 20, transfers said decryption cipher key Ba information to a selected decryptor, 224, and causes decryptor, 224, to commence decrypting any received information, using said key information and selected decryption cipher algorithm B, and outputting decrypted information to matrix switch, 258. Automatically, controller, 20, causes matrix switch, 258, to transfer the information of the aforementioned video output inputted from said tuner, 215, to the output that outputs to decryptor, 224, thereby causing said decryptor, 224, to receive the
	Reference	See "Data Transfer Network" in Fig. 2.	Page 311 line 33 to page 312 line 8.	Page 293 lines 32-35.	Page 301 lines 6-9.	Page 308 line 35 to page 309 line 3.	Page 299 lines 13-25.
Applicants' Priority U.S. Pat. No. '490			In any of the cases illustrated in FIGs 4A through 4E, signal processors, 100, 103, 106, 109, and 112, could also operate in a predetermined fashion and telephone a remote site to get an additional signal or signals necessary for the proper decryption and/or transfer of incoming programing transmissions.				The signal or signals necessary for the decryption of the channel that box, 114, passes to decryptor/interruptor, 115,
Applicants	Reference	"Data Transfer Network" in Fig. 1.	Column 15 lines 20-25.				Column 14 lines 46-54.
Claim Language of	Instant Application		receiving operating instructions in response to said step of promulgating a query;				

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Instant Specification	Language	information of said video portion (said information being, as explained above, encrypted digital video), to decrypt said information,	At the station of Fig. 4, the preprogrammed information of said sixteen contiguous bit locations is decryption cipher key Ba	Automatically, controller, 20, transfers said decryption cipher key Ba information to a selected decryptor, 224, and causes decryptor, 224, to commence decrypting any received information, using said key information and selected decryption cipher algorithm B,	At the station of Fig. 4, the preprogrammed information of said sixteen contiguous bit locations is decryption cipher key Ba	such as, for example, the RAM of controller, 20;	asid head end is caused, in a predetermined fashion, to transmit a particular enabling SPAM message that consists of enable-CC13 instructions and enable-WSW instructions that include particular enable-WSW-programming information, on the frequency of said master control channel. (Hereinafter said message is called the "local-cable-enabling-message (#7).")	said "Wall Street Week" program when transmission of said program on cable cable 13 commences	particular master cable control channel (that may or may not be cable channel 13) from the multi-channel cable system
	Reference		Page 298 line 34 to page 299 line 1.	Page 299 lines 13-17.	Page 298 line 33 to page 299 line 1.	Page 293 line 20.	Page 291 lines 10-20.	Page 289 lines 25-27.	Page 290 lines 28-29.
Applicants' Priority U.S. Pat. No. '490	Language		in this case, is not located in the channel transmission.	They may be preprogramed into the signal processor (for example,		in programable randon access memory controller, 20, in Fig. 1)	or they may be transmitted in a channel other than the channel being transferred from box, 114.	·	
Applicants	Reference								
Claim Language of	Instant Application								

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Claim Language of	Applicant	Applicants' Priority U.S. Pat. No. '490		Instant Specification	
Instant Application	Reference	Language	Reference	Eanglage	
			Page 294 lines 28-35.	Resulting in a match causes controller, 20, to execute a particular portion of said enable-CC13 instructions.  Executing the instructions of said portion causes controller, 20, in the predetermined fashion of the said portion, to cause selected apparatus of the station of Fig. 4 to receive the cable channel 13 transmission, to cause selected apparatus to decrypt the audio portion of said transmission,	
	Column 9 lines 21-23.	[The Controller, 20] is interactive with external sources via telephone connection, 22, and	Page 273 lines 6-19.	Controller, 20, transfers the telephone number, 1-800-AUDITOR, to auto dialer, 24, and causes said dialer, 24, to dial said number. Said first computer answers said telephone call, and in a fashion well known in the art, controller, 20, and said first computer automatically establish telephone	
			Dage 527 lines 6 17	communications. Automatically, controller, 20, causes telephone connection, 22, to transfer particular identifying information that includes the unique digital identifying code of ROM, 21, to said first computer followed by a particular instruct-to- receive signal. Said instruct-to-receive signal causes said first computer automatically to prepare to receive audit records then to transfer a particular start signal via connection, 22, to controller, 20.	
		can be reprogramed from such remote sources.	1 ago 0.0 / IIIIcs 0-1 / .	At 3:10 AM, GMT, said European master network station transmits particular SPAM message information, embedded in the information of said master transmission, including a SPAM end of file signal and the aforementioned sequence of SPAM messages that contain operating system instructions. In	•
				so doing, said European master network station inputs operating system instructions to all SPAM apparatus and receiver station computers, 73, and microcomputers, 205, thereby causing said apparatus and computers, 73 and 205, as described above in	
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Claim Language of	Applicant	Applicants' Priority U.S. Pat. No. '490		Instant Specification	
Instant Application	Reference	Language	Reference	Language	$\overline{}$
			with respect to page 555 line 24 to page 556 line 14.	"PREPROGRAMMING RECEIVER STATION OPERATING SYSTEMS," to commence operating under control of the instructions of said operating systems. particular information of said TELEPHON EXE module that causes signal processor, 200, to transmit the information via telephone network in the fashion of example #10, to a computer at a particular remote data collection station.  Over the course of a particular time such as two days, computers at remote data collection stations receive data automatically from each farmer of said nations which data indicates the specific quantity of each crop that each farmer expects to harvest during the 2027 growing season. Automatically, the received data is aggregated, in a fashion well known in the art, at the computer of said European master network origination and control station Then, at 3:59 PM, on Thursday, February 18, 2027, the cycle of generating and communicating information of farmers is repeated	
and storing said operating instructions at said data storage device at said receiver station.	Column 7 lines 36-37.	Buffer/comparator, 8, organizes the data stream that it receives according to a predetermined fashion	Page 30 lines 7-9.	Buffer/comparator, 8, receives said signals from said decoders and other signals from other inputs and organizes the received information in a predetermined fashion.	<del></del>
			Page 36 line 32 to page 37 line 3.	Each decoder is controlled by a controller, 39, 44, or 47, that has buffer, microprocessor, ROM, and RAM capacities. Said buffer capacity of controller, 39, 44, or 47, includes capacity for organizing, inputs	
	Column 5 lines 16-20.	[The apparatus] has a read only memory for recording permanent operating instructions and other information and a programmable random access memory controller ("PRAM controller") that	Page 16 lines 6-10.	[The apparatus] has a read only memory for recording permanent operating instructions and other information and a programmable random access memory controller ("PRAM controller") that permits revision of operating	

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Instant Specification	Language	patterns and instructions.	Signal processor, 26, has a controller device which includes programmable RAM controller, 20; ROM, 21, that may contain unique digital code information capable of identifying signal processor, 26, and the subscriber station of said processor, 26, uniquely; an automatic dialing device 24; and a telephone unit, 22 Controller, 20, has capacity for controlling the operation of all elements of the signal processor	In the fashions described above, so transmitting said SPAM message causes signal processor, 200, at decoder, 30, (to which said master control channel is inputted), to detect the information of said message, select the information of the execution segment in said message, and determine that said selected information matches the aforementioned instance of enable-next-program-on-CC13 information at said particular controlled-function-invoking information location. So determining a match causes the control processor, 39J, to execute particular preprogrammed transfer-this-message-to-controller-20 instructions that are associated with the instance of information at said particular location.	Resulting in a match causes controller, 20, to execute a particular portion of said enable-CC13 instructions.  Executing the instructions of said portion causes controller, 20, in the predetermined fashion of the said portion, to cause selected apparatus of the station of Fig. 4 to receive the cable channel 13 transmission, to cause
	Reference		Page 33 lines 7-20.	Page 291 lines 21-32.	Page 294 lines 28-35.
Applicants' Priority U.S. Pat. No. '490	Language	permits revision of operating patterns and instructions.	The signal processor apparatus also has a controller device which includes programable random access memory controller 20, read only memory 21 that may contain a unique digital code capable of identifying the signal processing apparatus uniquely, an automatic dialing device 24, and a telephone unit, 22. The controller, 20, governs the operation of all operating elements of the apparatus.	If signal processor, 112, can identify, processes, and transfer the needed signal or signals, decryptor/interruptor, 115, can decrypt and/or transfer the incoming transmission from box, 114, satisfactorily.	
Applicants	Reference		Column 8 lines 20-27.	Column 15 lines 1-4.	
Claim Language of	Instant Application		3. The method of claim 2, further comprising the steps of: processing or	outputting information on the basis of said operating instructions at said receiver station;	

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Claim Language of	Applican	Applicants' Priority U.S. Pat. No. '490		Instant Specification
Instant Application	Reference	Language	Reference	Language
				selected apparatus to decrypt the audio portion of said transmission,
storing a data record evidencing	Column 7 lines 50-60.	Processor or monitor, 12, analyzes, in a pre-determined fashion, the signal words and units that it receives and determines whether they are to be passed to external equipment or to buffer/comparator, 14, for further processing or both. If a signal or signals are to be passed externally, processor unit, 12, identifies, in a predetermined fashion, the external equipment to which the signal or signals are addressed and passes them to appropriate jack ports for external transmission. If they are to be processed further, processor or monitor, 12, passes them to buffer/comparator, 14.	Page 31 lines 10-22.	Controller, 12, receives the signals inputted from buffer/comparator, 8, and decryptor, 10; analyzes said signals in a predetermined fashion; and determines whether they are to be transferred to external equipment or to buffer/comparator, 14, or both. If a signal or signals are to be transferred externally, in a predetermined fashion controller, 12, identifies the external apparatus to which the signal or signals are addressed and transfers them to the appropriate port or ports for external transmission. If they contain meter and/or monitor information and are to be processed further, controller, 12, selects, assembles, and transfers the appropriate information to buffer/comparator, 14.
	Column 7 lines 65-67.	Buffer/comparator, 14, has means for identifying, according to a predetermined fashion, which signals are to be recorded.	Page 31 line 30 to page 32 line 6.	Buffer/comparator, 14, receives signal information that is meter information and/or monitor information organizes said received information into meter records and/or monitor records (called, in aggregate, hereinafter, "signal records") and transmits said signal records to a digital recorder, 16, and/or to one or more remote sites has capacity to determine, in a predetermined fashion or fashions, what received information should be recorded,
said step of processing or outputting; and	Column 7 lines 36-37.	Buffer/comparator, 8, organizes the data stream that it receives according to a predetermined fashion	Page 30 lines 7-9.	Buffer/comparator, 8, receives said signals from said decoders and other signals from other inputs and organizes the received information in a predetermined fashion.
			Page 36 line 32 to page 37 line 3.	Each decoder is controlled by a controller, 39, 44, or 47, that has buffer, microprocessor, ROM, and RAM capacities. Said buffer capacity of controller, 39, 44, or 47, includes capacity for organizing, inputs

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Instant Specification	Language	Buffer/comparator, 8, transfers signals that do not require decryption directly to processor or controller, 12.	Buffer/comparator, 14, receives signal information that is meter information and/or monitor information organizes said received information into meter records and/or monitor records (called, in aggregate, hereinafter, "signal records") and transmits said signal records to a digital recorder, 16, and/or to one or more remote sites has capacity to determine, in a predetermined fashion or fashions, what received information should be recorded,	Buffer/comparator, 14, receives signal information that is meter information and/or monitor information from controller, 12, and from other inputs; organizes said received information into meter records and/or monitor records (called, in aggregate, hereinafter, "signal records") in a predetermined fashion or fashions; and transmits said signal records to a digital recorder, 16,	Controller, 20, has capacity for controlling the operation of all elements of the signal processor	The first stage of said sequence involves transferring audit information to a particular first host computer at a first remote station.	causes controller, 20, to cause recorder, 16, to transmit all recorded meter audit records and particular other audit information to telephone connection, 22, which causes said connection, 22, to transmit said records and information to said first computer.
Ÿ	Reference	Page 30 lines 29-30.	Page 31 line 30 to page 32 line 6.	Page 31 line 30 to page 32 line 1.	Page 33 lines 18-20.	Page 273 lines 4-6.	Page 273 lines 21-25.
Applicants' Priority U.S. Pat. No. '490	Language	Buffer/comparator, 8, passes signal words and units not identified as requiring decryption directly to processor or monitor, 12.	Buffer/comparator, 14, has means for identifying, according to a predetermined fashion, which signals are to be recorded.	Upon determining in a predetermined fashion that a signal word or unit should be passed, buffer/comparator, 14, transmits the combined information to a digital recorder, 16.	The controller, 20, also inputs the digital recorder, 16, to direct it to output the information from the memory of the recorder 16, to talenhous connection, 22	and thence to the collection site at the remote geographical location.	
Applicants	Reference	Column 7 lines 47-49.	Column 7 lines 65-67.	Column 8 lines 4-7.	Column 8 lines 46-50.		
Claim Language of	Instant Application		transferring said data record from said step of processing or outputting from said receiver station storage device to a data collection station in said data network through said data network connection.				

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Claim Language of Instant Application	Applican Reference	Applicants' Priority U.S. Pat. No. '490	Reference	Instant Specification Language
	See "Data" in Fig. 1.		See "Data" in Fig. 2.	
4. The method of claim 2 wherein said data network connection is a telephone interface connection.	Column 9 lines 21-22.	external sources via telephone connection, 22,	Page 273 lines 6-19.	Controller, 20, transfers the telephone number, 1-800-AUDITOR, to auto dialer, 24, and causes said dialer, 24, to dial said number. Said first computer answers said telephone call, and in a fashion well known in the art, controller, 20, and said first computer automatically establish telephone communications. Automatically, controller, 20, causes telephone connection, 22, to transfer particular identifying information that includes the unique digital identifying code of ROM, 21, to said first computer followed by a particular instruct-to- receive signal. Said instruct-to-receive signal causes said first computer automatically to prepare to receive audit records then to transfer a particular start signal via connection, 22, to controller, 20.
5. A method for providing and	Column 12 lines 45-47.	Beyond channel combining system and multiplexer, 92, amplifier, 94, transmits programing to signal processor, 71, and signal processor, 96,	Page 337 lines 1-8.	Fig. 6 shows particular signal processor system monitoring apparatus associated with the intermediate station of Fig. 6. In field distribution system, 93, amplifier, 94, inputs programming transmissions to signal processor system, 71, (where said transmissions are inputted to one alternate contact of the switch, 1, of the signal processor of said system, 71), and amplifier,
	Column 8 lines 58-60.	Control signals can be passed to the apparatus by means of the programing transmissions input at switch, 1, and mixer, 2.	Page 290 lines 26-31.	95, inputs programming transmissions to signal processor, 96, causes the oscillator, 6, then to cause switch, 1, and mixer, 3, to select information of a particular master cable control channel (that may or may not be cable channel 13) from the multi-channel cable system transmission inputted to signal processor, 200,

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Instant Specification	Reference	and to input said selected to TV signal decoder, 30;	Page 291 lines 21-24. In the fashions described above, so transmitting said SPAM message causes signal processor, 200, at decoder, 30, (to which said master control channel is inputted), to detect the information of said message,	A SPAM message is the modality whereby the original transmission station that originates said message controls specific addressed apparatus at subscriber stations.	Page 31 line 30 to page information that is meter information and/or monitor information organizes said received information into meter records and/or monitor records (called, in aggregate, hereinafter, "signal records") and transmits said signal records to a digital recorder, 16, and/or to one or more remote sites has capacity to determine, in a predetermined fashion or fashions, what received information should be recorded,	Buffer/comparator, 14, receives time information from clock, 18, and has means for incorporating time information into signal records.	Controller, 20, has capacity for controlling the operation of all elements of the signal processor	ines 4-6. The first stage of said sequence involves transferring audit information to a particular first host computer at a first remote station.	Page 273 lines 21-25 causes controller, 20, to cause recorder, 16,
Applicants' Priority U.S. Pat. No. '490	Language Re		Page 291.	Page 59 lines 29-31.	Buffer/comparator, 14, has means for identifying, according to a predetermined 32 line 6. fashion, which signals are to be recorded.	Buffer/comparator, 14, is connected to clock, 18, and has means for adding information such as time of receipt, for example, to signals.	The controller, 20, also inputs the digital recorder, 16, to direct it to output the information from the memory of the recorder 16, to telephone competition, 22	and thence to the collection site at the remote geographical location.	Page 273
	Instant Application Reference				tracking Column 7 lines 65-67.	Column 8 lines 2-4.	Column 8 lines 46-50.		

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Claim Language of	Applicant	Applicants' Priority U.S. Pat. No. '490		Instant Specification
Instant Application	Reference	150	Reference	Language
				telephone connection, 22, which causes said connection, 22, to transmit said records and information to said first computer.
a receiver station's use of a function	Column 9 lines 53-55.	The local oscillator, being thus sequenced, will allow each signal decoder, 30 and 40, to receive a particular frequency at a particular time interval.	Page 257 line 24 to page 258 line 19.  Page 265 line 27 to Page 266 line 21.	Said detection-complete information causes controller, 20, to cause oscillator, 6, to cause the selection of the next channel in the predetermined television channel selection pattern: wireless channel 9. Automatically oscillator, 6, causes mixer, 3, to select the frequency of channel 9 and input said frequency of channel 9 and input said frequency of interest, at a fixed frequency, to decoder, 30  Controller, 20, has capacity for keeping track of elapsed time, and after determining in a predetermined period of time has elapsed from the input of wireless channel 9 to decoder, 30, controller, 20, causes oscillator, 6, to cause the selection of the next channel in the predetermined television channel selection pattern: wireless channel 13.  Said radio-detection-complete information causes controller, 20, to cause oscillator, 6, to cause the selection of the next frequency selection pattern: 99.0 MHz. Automatically oscillator, 6, causes mixer, 2, to select said frequency and input it, at a fixed frequency, to decoder, 40  After determining, in a predetermined fashion, that a particular predetermined period of time has elapsed from the input of said 99.0 MHz frequency to decoder, 40, controller, 20, causes oscillator, 6, to cause the selection of the next frequency in the predetermined
	Column 8 lines 58-60.	Control signals can be passed to the apparatus by means of the programing transmissions input at switch, 1, and mixer,	Page 290 lines 26-31.	causes the oscillator, 6, then to cause switch, 1, and mixer, 3, to select information of a particular master cable control channel

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Claim Language of	Applicant	Applicants' Priority U.S. Pat. No. '490	E Transition	Instant Specification
Instant Application	Reference	Language	Reference	Language
		2.		(that may or may not be cable channel 13) from the multi-channel cable system transmission inputted to signal processor, 200, and to input said selected to TV signal decoder, 30;
			Page 291 lines 21-24.	In the fashions described above, so transmitting said SPAM message causes signal processor, 200, at decoder, 30, (to which said master control channel is inputted), to detect the information of said message,
			Page 59 lines 29-31.	A SPAM message is the modality whereby the original transmission station that originates said message controls specific addressed apparatus at subscriber stations.
	Column 8 lines 20-27.	The signal processor apparatus also has a controller device which includes programable random access memory controller 20, read only memory 21 that may contain a unique digital code capable of identifying the signal processing apparatus uniquely, an automatic dialing device 24, and a telephone unit, 22. The controller, 20, governs the operation of all operating elements of the apparatus.	Page 33 lines 7-20.	Signal processor, 26, has a controller device which includes programmable RAM controller, 20; ROM, 21, that may contain unique digital code information capable of identifying signal processor, 26, and the subscriber station of said processor, 26, uniquely; an automatic dialing device 24; and a telephone unit, 22 Controller, 20, has capacity for controlling the operation of all elements of the signal processor
	Column 20 lines 31-36.	This signal instructs buffer/comparator, 8, that, if 567 has been received from signal generator, 225, signal processor, 200, should, in a predetermined fashion, instruct tuner, 223, to tune cable converter box, 222, to the appropriate channel to receive the recipe in encoded digital form	Page 471 line 26 to page 472 line 17.	Five minutes later, said program originating studio embeds in the transmission of the "Exotic Meals of India" programming and transmits a particular first SPAM message that consists of check-for-entered-informationand-process instructions,  At the station of Figs. 7 and 7F, said message is detected at TV signal decoder, 145, and said execution segment information invokes particular controlled function instructions that cause said message to be transferred to the controller, 20, of signal processor, 200  Receiving said message causes controller,

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Instant Specification	inguage 🔭	20, to load and execute said check-forentered-information-and-process instructions, and executing said instructions causes controller, 20, to determine that TV567# information exists at said last-local-input-# memory  (An alternate method for inputting said second message to the microcomputers, 205, at stations where TV567# is entered at a local input, 225, is to embed said message in a particular second transmission that is different from the transmission of said "Exotic Meals of India" programming and to cause a selected All signal decoder, 290, at each one of said stations to receive said second transmission, thereby causing said decoder, 290, to detect and transfer the information of said second message to the microcomputer, 205, of said station.	In this alternate method, said first SPAM message causes controller, 20, of signal processor, 200, of each one of said stations to cause the tuner, 223, of a selected converter box, 222, to tune said box, 222, to receive said second transmission; to cause the matrix switch, 258, to establish a programming communication link between said selected converter box, 222, and said decoder, 290, to cause the appropriate receiver apparatus of said decoder, 290, to receive said transmission	Fig. 6 shows particular signal processor system monitoring apparatus associated with the intermediate station of Fig. 6. In field distribution system, 93, amplifier, 94, inputs programming transmissions to signal processor system, 71, (where said transmissions are inputted to one alternate contact of the switch, 1, of the signal
	Reference	Page 476 line 34 to page 477 line 8.	rage 477 mes 0-17.	Page 337 lines 1-8.
Applicants' Priority U.S. Pat. No. '490				Beyond channel combining system and multiplexer, 92, amplifier, 94, transmits programing to signal processor, 71, and signal processor, 96,
Applicant	Reference			Column 12 lines 45-47.
Claim Language of	Instant Application			in a data network

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Claim Language of	Applicant	Applicants' Priority U.S. Pat. No. '490		Instant Specification
Instant Application	Reference		Reference	Language
				processor of said system, 71), and amplifier, 95, inputs programming transmissions to signal processor, 96,
	Column 12 lines 57-61.	This particular embodiment describes a transmission facility transmitting only television programing. The facility could also process and transmit radio programing and other electronic data according to the methods described here	Page 339 lines 9-26.	So far this disclosure has described an intermediate transmission station that transmits conventional television programming; however, the intermediate station automating concepts of the present invention apply to all forms of electronically transmitted programming. The station of Fig. 6 can process and transmit radio programming in the fashions of the above television programming Likewise, said station can transmit broadcast print and data communications programming
	Column 15 lines 57-62.	The signals for which the decoders are monitoring are likely to be unique digital codes that may identify each programing or data unit received and the source of each. They may identify networks, broadcast stations, channels on cable systems, and possibly times of transmission.	Page 315 lines 20-24.	Each one of said decoders is preprogrammed to detect and transfer to said onboard controller, 14, via said bus means, the meter-monitor information of every unencrypted SPAM message in the transmission to which its associated apparatus is tuned.
			Page 44 lines 26-32.	Commands often contain meter-monitor segments. Said segments contain meter information and/or monitor information, and the information of said segments causes subscriber station signal processor systems to assemble, record, and transmit meter records to remote billing stations and monitor records to remote ratings stations in fashions that are described more fully below.
			Page 49 line 26 to Page 50 line 4.	Meter-monitor segments contain meter information and/or monitor information.  Examples of categories of such information include:  unique codes for programming; and unique codes that identify the sources and suppliers of computer data.

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Instant Specification	Language	origins of transmissions (eg., network source stations, broadcast stations, cable head end stations); dates and times	monitor information that identifies what programming is available,	Controller, 20, has capacity for controlling the operation of all elements of the signal processor	The first stage of said sequence involves transferring audit information to a particular first host computer at a first remote station.	causes controller, 20, to cause recorder, 16, to transmit all recorded meter audit records and particular other audit information to telephone connection, 22, which causes said connection, 22, to transmit said records and information to said first computer.	[Signal processor in Fig. 7] has capacity, at each station, for receiving monitor information that identifies what programming is available, what programming is used, and how said programming is used and capacity for assembling and retaining monitor records that document said availability and usage. It has capacity for transferring said meter records automatically to one or more remote automated billing stations that account for programming and information consumption and bill subscribers and said monitor records	"ratings" stations that collect statistical data on programming availability and usage meter-monitor segments. Said segments	contain meter information and/or monitor information, and the information causes
	Reference		Page 28 lines 26-27.	Page 33 lines 18-20.	Page 273 lines 4-6.	Page 273 lines 21-25.	Page 28 lines 25-35.	Page 44 lines 26-30.	
Applicants' Priority U.S. Pat. No. '490	Language			The controller, 20, also inputs the digital recorder, 16, to direct it to output the information from the memory of the recorder 16 to telephone connection 22			when signal processor, 200, transfers the data in its data recorder, 16, via telephone to a remote site,		purposes that the recipe was,
Applicants	Reference			Column 8 lines 46-50.			Column 20 lines 54-58.		
Claim Language of	Instant Application			at a data collection station, said receiver station having					

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Instant Specification	Language	subscriber station signal processor systems to assemble, record, and transmit meter records to remote billing stations  Five minutes later, said program originating studio embeds in the transmission of the "Exotic Meals of India" programming and transmits a particular first SPAM message that consists of meter-monitor information	One minute later, said program originating studio embeds in the transmission of said "Exotic Meals of India" programming and transmits a particular second SPAM message that consists of meter-monitor information including	Executing said instructions also causes controller, 20, to initiate a particular signal record of meter information at the buffer, 14, of signal processor, 200, which record contains particular program unit information and TV567# information.	Each subscriberin particular, the subscriber of the station of Figs. 7 and 7F,enters TV567#	Receiving said message causes the controller, 39, of decoder, 203, to load and execute said generate-recipe instructions at microcomputer, 205, and to transfer particular meter-monitor information to the buffer/comparator, 14, of signal processor, 200, causing said buffer/comparator, 14, to increment the information of said signal record of meter information in the fashion described above.	Said detection-complete information causes controller, 20, to cause oscillator, 6, to cause the selection of the next channel in the
	Reference	Page 471 lines 26-31.	Page 473 lines 3-8.	rage 4/2 lines 25-2/ with	Page 471 lines 14-16.	Page 473 line 29 to Page 474 line 1.	Page 257 line 24 to page 258 line 19.
Applicants' Priority U.S. Pat. No. '490	Language			first, ordered		and, second, delivered.	The local oscillator, being thus sequenced, will allow each signal decoder, 30 and 40, to receive a particular frequency at a
Applicant	Reference						Column 9 lines 53-57.
Claim Language of	Instant Application						a data network connection, a processor,

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Claim Language of	Applica	Applicants' Priority U.S. Pat. No. '490		Instant Specification
Instant Application	Reference	Language	Reference	Language
		selected in accordance with standard broadcast and cablecast practices known to exist on that transmission line or frequency.	•	standard broadcast and cablecast practices that apply on said transmissions and frequencies In a predetermined fashion, controller, 20, controls oscillator, 6, to sequence local oscillator, 6, in the pattern: cable channel 2, cable channel 4, cable channel 7, cable channel 13, wireless channel 5, wireless channel 8, wireless said pattern.
			Page 257 line 24 to page 258 line 19.	Said detection-complete information causes controller, 20, to cause oscillator, 6, to cause the selection of the next channel in the predetermined television channel selection pattern: wireless channel 9. Automatically oscillator, 6, causes mixer, 3, to select the frequency of channel 9 and input said frequency of interest, at a fixed frequency, to decoder, 30  Controller, 20, has capacity for keeping track of elapsed time, and after determining in a predetermined fashion that a particular predetermined period of time has elapsed from the input of wireless channel 9 to decoder, 30, controller, 20, causes oscillator, 6, to cause the selection of the next channel in the predetermined television channel selection pattern: wireless channel 13.
		The local oscillator, being thus sequenced, will allow each signal decoder, 30 and 40, to receive a particular frequency at a particular time interval.	Page 257 line 24 to page 258 line 19.	Said detection-complete information causes controller, 20, to cause oscillator, 6, to cause the selection of the next channel in the predetermined television channel selection pattern: wireless channel 9. Automatically oscillator, 6, causes mixer, 3, to select the frequency of channel 9 and input said frequency of interest, at a fixed frequency, to decoder, 30  Controller, 20, has capacity for keeping track of elapsed time, and after determining in a predetermined fashion that a particular predetermined period of time has elapsed from

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Instant Application	Reference	Language	Reference	Language
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-				the input of wireless channel 9 to decoder, 30, controller, 20, causes oscillator, 6, to cause the selection of the next channel in the predetermined television channel selection pattern: wireless channel 13.
			Page 265 line 27 to Page 266 line 21.	Said radio-detection-complete information causes controller, 20, to cause oscillator, 6, to cause the selection of the next frequency in the predetermined radio frequency selection pattern: 99.0 MHz. Automatically oscillator, 6, causes mixer, 2, to select said frequency and input it, at a fixed frequency, to decoder, 40  After determining, in a predetermined fashion, that a particular predetermined period
				of time has elapsed from the input of said 99.0 MHz frequency to decoder, 40, controller, 20, causes oscillator, 6, to cause the selection of the next frequency in the predetermined radio frequency selection pattern: 100.0 MHz.
	This com 34, 3 34, 2 2B.	This will define the timing of the composite outputs of the digital detectors, 34, 37, and 38 in FIG. 2A, and 43 in FIG. 2B.	Page 250 lines 13-17.	Example #5 begins with the embedding and transmitting, at the remote station that originates the "Wall Street Week" broadcast, of the first message of the "Wall Street Week" program which is the message of the first combining synch command.
			Page 251 lines 8-11.	Receiving said embedded information causes the binary SPAM information of said first command, with error correcting information, to be detected at detector, 34;
			Page 263 lines 19-24.	said information to radio decoder, 42, which decodes the the embedded signal information of said command and transmits said signal information to digital detector, 43, which detects the binary information with
				error correcting bit information of said command and transfers said binary and bit information to controller, 44.

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Claim Language of	Applicant	Applicants' Priority U.S. Pat. No. '490		Instant Specification
Instant Application	Reference	Language	Reference	Language
			Page 37 lines 26-28.	In each decoder, the controller, 39, 44, or 47, receives detected digital information from the relevant detector or detectors, 34, 37, 38, 43, and 46.
and a data storage device, said data network having	Column 2 line 63 to column 3 line 3.	(The term "signal unit" hereinafter means one complete signal instruction or information message unit. Examples of signal units are a unique code identifying a programing unit, or a unique purchase order number identifying the proper use of a programing unit, or a general instruction identifying whether a programing unit is to be retransmitted immediately or recorded for delayed transmission.	Page 14 lines 26-32.	(The term "signal unit" hereinafter means one complete signal instruction or information message unit. Examples of signal units are a unique code identifying a programming unit, or a unique purchase order number identifying the proper use of a programming unit, or a general instruction identifying whether a programming unit is to be retransmitted immediately or recorded for delayed transmission.
a plurality of data information sources, said method comprising the steps of:	Column 10 lines 30-39.	The facility receives programing from many sources. Transmissions may be received from satellites by satellite antenna, 50, low noise amplifiers, 51 and 52, and TV receivers, 53, 54, 55, and 56. Microwave transmissions can be received by microwave antenna, 57, and television video and audio receivers, 58 and 59. Conventional TV broadcast transmissions can be received by antenna, 60, and TV demodulator, 61. Other electronic programing input means, 62, can receive programing transmissions.	Page 324 lines 23-31.	The station receives programming from many sources. Transmissions are received from a satellite by satellite antenna, 50, low noise amplifiers, 51 and 52, and TV receivers, 53, 54, 55, and 56. Microwave transmissions are received by microwave antenna, 57, and television video and audio receivers, 58 and 59. Conventional TV broadcast transmissions are received by antenna, 60, and TV demodulator, 61. Other electronic programming transmissions are received by other programming input means, 62.
providing operating instructions or	Column 12 lines 45-47.	Beyond channel combining system and multiplexer, 92, amplifier, 94, transmits programing to signal processor, 71, and signal processor, 96,	Page 337 lines 1-8.	Fig. 6 shows particular signal processor system monitoring apparatus associated with the intermediate station of Fig. 6. In field distribution system, 93, amplifier, 94, inputs programming transmissions to signal processor system, 71, (where said transmissions are inputted to one alternate contact of the switch, 1, of the signal processor of said system, 71), and amplifier, 95, inputs programming transmissions to signal processor, 96,

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Claim Language of	Applican	Applicants' Priority U.S. Pat. No. '490		Instant Specification
Instant Application	Reference	Language	Reference	Language
	Column 8 lines 58-60.	Control signals can be passed to the apparatus by means of the programing transmissions input at switch, 1, and mixer, 2.	Page 290 lines 26-31.	causes the oscillator, 6, then to cause switch, 1, and mixer, 3, to select information of a particular master cable control channel (that may or may not be cable channel 13) from the multi-channel cable system transmission inputted to signal processor, 200, and to input said selected to TV signal decoder, 30;
	·		Page 291 lines 21-24.	In the fashions described above, so transmitting said SPAM message causes signal processor, 200, at decoder, 30, (to which said master control channel is inputted), to detect the information of said message,
			Page 59 lines 29-31.	A SPAM message is the modality whereby the original transmission station that originates said message controls specific addressed apparatus at subscriber stations.
	Column 8 lines 62-65.	The processor unit, 12, has the capacity to identify instruction signsls for controller, 20, and pass them to controller, 20, over control information lines.	Page 59 lines 29-31.	A SPAM message is the modality whereby the original transmission station that originates said message controls specific addressed apparatus at subscriber stations.
			rot exampte, page 331	Said contained messages that are addressed to apparatus such as decoder, 30, PRAM controller, 20, and switch controller, 20A, that exist within the equipment case of a signal processor, 200, are inputted to said apparatus from controller, 12, via controller, 20, rather than via matrix switch, 259
executable code to a plurality of receiver stations	Column 7 lines 50-58.	Processor or monitor, 12, analyzes, in a pre-determined fashion, the signal words and units that it receives and determines whether they are to be passed to external equipment or to buffer/comparator, 14, for further processing or both. If a signal or signals are to be passed externally, processor unit, 12, identifies, in a pre-	Page 31 lines 10-18.	Controller, 12, receives the signals inputted from buffer/comparator, 8, and decryptor, 10, analyzes said signals in a predetermined fashion; and determines whether they are to be transferred to external equipment or to buffer/comparator, 14, or both. If a signal or signals are to be transferred externally, in a predetermined fashion controller, 12,

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-	ce Language Reference		Language
	determined fashion, the external equipment to which the signal or signals are addressed and passes them to appropriate jack ports for external transmission.	% +	identifies the external apparatus to which the signal or signals are addressed and transfers them to the appropriate port or ports for external transmission.
the roc	The signal transmission from processor, 204, also passes a signal word to signal processor, 200,		In this alternate method, said first SPAM message causes controller, 20, of signal processor, 200, of each one of said stations to cause an instance of particular covert control information that is in said instruction to be placed at particular control-functioninvoking information memory of the controller, 39, of said decoder, 290. In due course, said programming originating
	Page 281 lines 1-6.		By themselves, the first and second features provide a technique whereby a message such as the second message of the "Wall Street Week" program can take affect at only selected stations (such as those stations preprogrammed with decryption key J) without being decrypted at said stations. (Hereinafter, this technique is called "covert control.")
which, in a processor, 2	which, in a predetermined fashion, signal page 282 line 2 to processor, 200, decrypts and transfers page 283 line 33.		the information of said segments is encrypted prior to transmission  The program originating studio embeds and transmits the 1st supplementary message (#6) before transmitting said second message. Just as is the case with the first message of example #4, receiving the 1st supplementary message (#6) causes the apparatus of said station to decrypt said message (using key J) and execute any controlled functions that are invoked by the unencrypted execution segment of said message  Executing said information causes control processor, 391, to locate the location of that particular instance of controlled-function-invoking information that

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Claim Language of	Applicants' Priority	U.S. Pa	Document	Instant Specification
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				is "100110" and modify the information at said location to be "111111".
		to decrypter, 224, to serve as the code upon which decrypter, 224, will decrypt the incoming encrypted recipe.	Page 478 lines 1-5.	(Whichever transmission method is employed the information of said second message can be encrypted and caused to be decrypted in any of the methods described abovefor example, in the method of the first message of example #4.)
	Column 3 lines 48-51.	Another method has application at receiver sites such as private homes or public places like theaters, hotels, brokerage offices, etc., whether commercial establishments or not.	Page 12 lines 30-35.	It is the further purpose of this invention to provide means and methods for the automation of ultimate receiver stations, Such ultimate receiver stations may be private homes or offices or commercial establishments such as theaters, hotels, or brokerage offices.
from	Column 10 lines 40-47.	All of these received transmissions feed into the facility by hard-wire and connect, by means of conventional switches (here matrix switch, 75), to one or more video recorder/players, 76 and 78, and/or to equipment that outputs them over various channels to the cable system's field distribution system, 93, which equipment includes here cable channel modulators, 83, 87, and 91, and channel combining and multiplexing system, 92.	Page 324 line 31 to page 325 line 4.	Each receiver/modulator/input apparatus, 53 through 62, transfers its received transmissions into the station by hard-wire, a conventional matrix switch, 75, well known in the art, one or more recorder/players, 76 and 78, apparatus that outputs said transmissions over various channels to the cable system's field distribution system, 93, which apparatus includes cable channel modulators, 83, 87, and 91, and channel combining and multiplexing system, 92.
said plurality of data information sources;	Column 10 lines 30-39.	The facility receives programing from many sources. Transmissions may be received from satellites by satellite antenna, 50, low noise amplifiers, 51 and 52, and TV receivers, 53, 54, 55, and 56. Microwave transmissions can be received by microwave antenna, 57, and television video and audio receivers, 58 and 59. Conventional TV broadcast transmissions can be received by antenna, 60, and TV demodulator, 61. Other electronic programming input means, 62, can receive	Page 324 lines 23-31.	The station receives programming from many sources. Transmissions are received from a satellite by satellite antenna, 50, low noise amplifiers, 51 and 52, and TV receivers, 53, 54, 55, and 56. Microwave transmissions are received by microwave antenna, 57, and television video and audio receivers, 58 and 59. Conventional TV broadcast transmissions are received by antenna, 60, and TV demodulator, 61. Other electronic programming transmissions are received by other electronic

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Applicants' Priority U.S. Pat. No. '490  Language  programing transmissions.  This particular embodiment describes a transmission facility transmitting only television programing. The facility could also process and transmit radio programing and other electronic data according to the methods described here
Control signals can be passed to the apparatus by means of the programing transmissions input at switch, 1, and mixer, 2.
The signal processor apparatus also has a controller device which includes programable random access memory controller 20, read only memory 21 that may contain a unique digital code capable of identifying the signal processing apparatus uniquely, an automatic dialing

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Instant Specification	xe Language	a telephone unit, 22 Controller, 20, has capacity for controlling the operation of all elements of the signal processor	S-20. Controller, 20, has capacity for controlling the operation of all elements of the signal processor	Among said preprogrammed instructions is key information of J, and said instructions cause controller, 20, automatically to select and transfer said key information to decryptor, 10.	Decryptor, 10, receives said key information and automatically commences using it as its key for decryption.	Be 149 150 line Said decrypt-a-00-header-message instructions cause controller, 20, to cause decryptor, 10, to transfer the first H bits without decrypting or altering said bits in any fashion, to decrypt and transfer the next X bits, to transfer the next L bits without	decrypting or altering said bits, to decrypt and transfer the next MMS-L bits, and finally, to transfer any bits remaining after the last of said MMS-L bits without decrypting or altering said bits. In this fashion, the cadence information in said message, which is not encrypted, is transferred by decryptor, 10, to		2-17 selected converter box, 222, to tune said
S. Pat. No. '490	Language	device 24, and a telephone unit, 22. The controller, 20, governs the operation of all operating elements of the apparatus.	[Controller, 20] can tell decrypter, 10, when and how to change decryption patterns, fashions, and techniques.	lines 23-28.	Domestic and	For example, page 149 line 27 to page 150 line 6.		When the transmission of the recipe is Page 473 lines 3-13. received, box 222, transfers the transmission to decrypter, 224, for decryption and thence to printer, 221, for printing.	Page 477 lines 12-17.
oplicants' Priority U	Reference	device 24, an controller, 20 operating eler	Column 8 lines 39-40. [Controller, 2 when and hove patterns, fash				***	Column 20 lines 46-49. When the tra received, box transmission decryption an printing.	
Claim Language of	Instant Application		<u>ලි</u>					executable code at said Colrreceiver station;	

Claim Language of	Applicant	Applicants' Priority U.S. Pat. No. '490		Instant Specification
Instant Application	Reference		Reference	Language
				to cause the matrix switch, 258, to link said selected converter box, 222, and said decoder, 290; said decoder, 290, to receive said transmission
			Page 477 lines 23-29.	causes said decoder, 290, to detect and process properly the information of said second message.
			Page 478 lines 1-5.	(Whichever transmission method is employed the information of said second message can be encrypted and caused to be decrypted in any of the methods described abovefor example, in the method of the first message of example #4.)
			Page 475 lines 1-2.	Receiving said output information causes printer, 221, to print the information of said specific recipe and list.
	Column 20 lines 37-42.	The signal transmission from processor, 204, also passes a signal word to signal processor, 200,	Page 477 lines 8-23.	In this alternate method, said first SPAM message causes controller, 20, of signal processor, 200, of each one of said stations to cause an instance of particular covert control information that is in said instruction to be placed at particular control-functioninvoking information memory of the controller, 39, of said decoder, 290. In due course, said programming originating
			Page 281 lines 1-6.	By themselves, the first and second features provide a technique whereby a message such as the second message of the "Wall Street Week" program can take affect at only selected stations (such as those stations preprogrammed with decryption key J) without being decrypted at said stations. (Hereinafter, this technique is called "covert control.")
		which, in a predetermined fashion, signal processor, 200, decrypts and transfers	Page 282 line 2 to page 283 line 33.	the information of said segments is encrypted prior to transmission

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Claim Language of	Applicant	Applicants' Priority U.S. Pat. No. '490		Instant Specification
Instant Application	Reference		Reference	Language
			-	The program originating studio embeds and transmits the 1st supplementary message (#6) before transmitting said second message. Just as is the case with the first message of example #4, receiving the 1st supplementary message (#6) causes the apparatus of said station to decrypt said message (using key J) and execute any controlled functions that are invoked by the unencrypted execution segment of said message  Executing said information causes control processor, 39J, to locate the location of that particular instance of controlled-function-invoking information that is "100110" and modify the information at said location to be "111111".
		to decrypter, 224, to serve as the code upon which decrypter, 224, will decrypt the incoming encrypted recipe.	Page 478 lines 1-5.	(Whichever transmission method is employed the information of said second message can be encrypted and caused to be decrypted in any of the methods described abovefor example, in the method of the first message of example #4.)
recording an identification of	Column 20 lines 49-54.	Other signal decoder, 227, identifies a signal in the transmission received by printer, 221, which it passes via processor, 228, and buffer/comparator, 14, of signal processor, 200, to data recorder, 16. This signal indicates that the recipe, itself, has been received.	Page 473 line 29 to page 474 line 1	Receiving said message causes the controller, 39, of decoder, 203, to load and execute said generate-recipe instructions at microcomputer, 205, and to transfer particular meter-monitor information to the buffer/comparator, 14, of signal processor, 200, causing said buffer/comparator, 14, to increment the information of said signal record of meter information in the fashion described above.
			Page 314 line 30-33.	At printer, 221, is other decoder, 227. At other output system, 261, is other decoder, 286. Each decoder is likely to be located physically inside the unit of its associated intermediate or output apparatus.

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Instant Specification	Language	One minute later, said program originating studio embeds in the transmission of said "Exotic Meals of India" programming and transmits a particular second SPAM message that consists of generate-recipe instructions	selected converter box, 222, to tune said box, 222, to receive said second transmission; to cause the matrix switch, 258, to link said selected converter box, 222, and said decoder, 290; said decoder, 290, to receive said transmission	causes said decoder, 290, to detect and process properly the information of said second message.	(Whichever transmission method is employed the information of said second message can be encrypted and caused to be decrypted in any of the methods described above-for example, in the method of the first message of example #4.)	Receiving said output information causes printer, 221, to print the information of said specific recipe and list.	In this alternate method, said first SPAM message causes controller, 20, of signal processor, 200, of each one of said stations to cause an instance of particular covert control information that is in said instruction to be placed at particular control-function-invoking information memory of the controller, 39, of said decoder, 290. In due course, said programming originating	By themselves, the first and second features provide a technique whereby a message such as the second message of the "Wall Street
7 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	Reference	Page 473 lines 3-13.	Page 477 lines 12-17.	Page 477 lines 23-29.	Page 478 lines 1-5.	Page 475 lines 1-2.	Page 477 lines 8-23.	Page 281 lines 1-6.
Priority U.S. Pat. No. '490	Language	When the transmission of the recipe is received, box 222, transfers the transmission to decrypter, 224, for decryption and thence to printer, 221, for printing.					The signal transmission from processor, 204, also passes a signal word to signal processor, 200,	
Applicants' Priority	Reference	Column 20 lines 46-49.		-			Column 20 lines 37-42.	
Claim Language of	Instant Application	said performed function at said data storage device at said receiver station; and						

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Claim Language of	Applican	Applicants' Priority U.S. Pat. No. '490		Instant Specification
Instant Application	Reference		Reference	Language
				Week" program can take affect at only selected stations (such as those stations preprogrammed with decryption key J) without being decrypted at said stations. (Hereinafter, this technique is called "covert control.")
,		which, in a predetermined fashion, signal processor, 200, decrypts and transfers	Page 282 line 2 to page 283 line 33.	the information of said segments is encrypted prior to transmission  The program originating studio embeds and transmits the 1st supplementary message (#6) before transmitting said second message. Just as is the case with the first message of example #4, receiving the 1st supplementary message (#6) causes the apparatus of said station to decrypt said message (using key J) and execute any controlled functions that are invoked by the unencrypted execution segment of said message  Executing said information causes control processor, 39J, to locate the location of that particular instance of controlled-function-invoking information that is "100110" and modify the information at said location to be "111111".
		to decrypter, 224, to serve as the code upon which decrypter, 224, will decrypt the incoming encrypted recipe.	Page 478 lines 1-5.	(Whichever transmission method is employed the information of said second message can be encrypted and caused to be decrypted in any of the methods described abovefor example, in the method of the first message of example #4.)
	Column 20 lines 42-46.	Then, as part of the predetermined operation, signal processor, 200, conveys to its data recorder, 16, information that the 567 order was placed by the viewer and all necessary equipment was enabled.	Page 472 lines 23-27.	Executing said instructions also causes controller, 20, to initiate a particular signal record of meter information at the buffer, 14, of signal processor, 200, which record contains particular program unit information and TV567# information.
			Page 473 line 29 to	Receiving said message causes the

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Instant Specification	Reference	controller, 39, of decoder, 203, to load and execute said generate-recipe instructions at microcomputer, 205, and to transfer particular meter-monitor information to the buffer/comparator, 14, of signal processor, 200, causing said buffer/comparator, 14, to increment the information of said signal record of meter information in the fashion described above.	8 lines 25-35. [Signal processor in Fig.7] has capacity, at each station, for receiving monitor information that identifies what programming is available, what programming is used, and how said programming is used and capacity for assembling and retaining monitor records that document said availability and usage. It has capacity for transferring said meter records automatically to one or more remote automated billing stations that account for programming and information consumption and bill subscribers and said monitor records automatically to one or more remote so-called "ratings" stations that collect statistical data on programming availability and usage.	4 lines 26-30 meter-monitor segments. Said segments contain meter information and/or monitor information, and the information causes subscriber station signal processor systems to assemble, record, and transmit meter records to remote billing stations	Five minutes later, said program originating studio embeds in the transmission of the "Exotic Meals of India" programming and transmits a particular first SPAM message that consists of meter-monitor information,	
Reference page 474 line 1.	ge 474 line 1.		Page 28 lines 25-35.	Page 44 lines 26-30.	Page 471 lines 26-31.	Page 473 lines 3-8.
	Language		when signal processor, 200, transfers the data in its data recorder, 16, via telephone to a remote site,	that site can determine for billing purposes that the recipe was,		
O fillour allouder	Reference	÷	Column 20 lines 54-58.			
Claim Language of	Instant Application		transferring said record of identification to a data collection station on said data network through said receiver station network connection.			

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Instant Specification	Language	transmits a particular second SPAM message that consists of meter-monitor information including	Executing said instructions also causes controller, 20, to initiate a particular signal record of meter information at the buffer, 14, of signal processor, 200, which record contains particular program unit information and TV567# information.	Each subscriberin particular, the subscriber of the station of Figs. 7 and 7F,enters TV567#	Receiving said message causes the controller, 39, of decoder, 203, to load and execute said generate-recipe instructions at microcomputer, 205, and to transfer particular meter-monitor information to the buffer/comparator, 14, of signal processor, 200, causing said buffer/comparator, 14, to increment the information of said signal record of meter information in the fashion described above.	Controller, 20, has capacity for controlling the operation of all elements of the signal processor	The first stage of said sequence involves transferring audit information to a particular first host computer at a first remote station.	causes controller, 20, to cause recorder, 16, to transmit all recorded meter audit records and particular other audit information to telephone connection, 22, which causes said connection, 22, to transmit said records and information to said first computer.
	Keterence		Page 472 lines 23-27 with	Page 471 lines 14-16.	Page 473 line 29 to Page 474 line 1.	Page 33 lines 18-20.	Page 273 lines 4-6.	Page 273 lines 21-25.
Applicants' Priority U.S. Pat. No. '490	Language		first, ordered		and, second, delivered.	The controller, 20, also inputs the digital recorder, 16, to direct it to output the information from the memory of the recorder 16 to telenhone connection 22	and thence to the collection site at the remote geographical location.	
Applicants	Keterence					Column 8 lines 46-50.		
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Instant Specification	Language
	Reference
Priority U.S. Pat. No. '490	Language
Applicants	Reference
Claim Language of	Instant Application

Controller, 20, has capacity for controlling the operation of all elements of the signal processor	The first stage of said sequence involves transferring audit information to a particular first host computer at a first remote station.	causes controller, 20, to cause recorder, 16, to transmit all recorded meter audit records and particular other audit information to telephone connection, 22, which causes said connection, 22, to transmit said records and information to said first computer.
Page 33 lines 18-20.	Page 273 lines 4-6.	Page 273 lines 21-25.
The controller, 20, also inputs the digital recorder, 16, to direct it to output the information from the memory of the recorder, 16, to telephone connection, 22,	and thence to the collection site at the remote geographical location.	
Column 8 lines 46-50.		
6. The method of claim Solumn 8 lines 46-50. 5, wherein said receiver station network connection is a	telephone network connection.	

To avoid overloading digital recorder, 16, with duplicate data, buffer/comparator, 14, has means for counting and/or discarding duplicate instances of particular signal information	Signal processor, 26, has a controller device which includes programmable RAM controller, 20; ROM, 21, that may contain unique digital code information capable of identifying signal processor, 26, and the subscriber station of said processor, 26, uniquely; an automatic dialing device 24; and a telephone unit, 22 Controller, 20, has capacity for controlling the operation of all elements of the signal processor
Page 32 lines 9-12.	Page 33 lines 7-20.
To avoid overloading digital recorder, 16, with duplicate data, buffer/comparator, 14, has means for counting and discarding duplicate signals.	The signal processor apparatus also has a controller device which includes programable random access memory controller 20, read only memory 21 that may contain a unique digital code capable of identifying the signal processing apparatus uniquely, an automatic dialing device 24, and a telephone unit, 22. The controller, 20, governs the operation of all operating elements of the apparatus.
Column 7 line 67 to column 8 line 1.	Column 8 lines 20-27.
7. The method of claim 5, wherein said function in said step of performing a function is a series of numerical functions performed on	a computer.

## Please cancel claims 8 to 42.

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Said studio transmits the information of said	program to a plurality of intermediate	transmission stations by so-called "landline"	means and/or Earth orbiting satellite	
Page 289 lines 4-15.				
a broadcast station transmitting only a	single channel of programing or a cable	system cablecasting many channels.		
Column 10 lines 18-20.				
43. A method of	delivering one of	broadcast programming	and cablecast	

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Claim Language of	Applican	Applicants' Priority U.S. Pat. No. '490	500	Instant Specification
Instant Application	Keterence	Language	Reference	Language
programming to a subscriber in a communications network,	Column 6 lines 23-30.	A signal processor apparatus for simultaneous use with a cablecast input that conveys both television and radio programing and a broadcast television input is shown in Figure 1. As shown, the input signals are the entire range of frequencies or channels transmitted on the cable and the entire range of broadcast television transmissions available to a local television antenna of conventional design.		transponder means, well known in the art. Each of said intermediate transmission stations receives the transmission originated by said studio and retransmits the information of said transmission to a plurality of ultimate receiver stations.  In example #7, the intermediate station that retransmits "Wall Street Week" program information to the subscriber station of Fig. 4 is a cable television system head end (such as the head end of Fig. 6).
			Page 324 lines 11-17.	The stations so automated may transmit any form of electronically transmitted programming, including television, radio, print, data, and combined medium programming and may range in scale of operation from wireless broadcast stations that transmit a single programming transmission to cable systems that cablecast many channels simultaneously.
			Page 29 lines 6-15.	Said processor, 26, is configured for simultaneous use with a cablecast input that conveys both television and radio programming and a broadcast television input. At switch, 1, and mixers, 2 and 3, signal processor, 26, monitors all frequencies or channels available for reception at the subscriber station of Fig. 2 to identify available programming. The inputted information is the entire range of frequencies or channels transmitted on the cable and the entire range of broadcast television transmissions available to a local television antenna of conventional design.
said communications network including a transmitter station	Column 10 lines 24-28.	FIGS. 3A, 3B and 3C illustrates one instance of such use. Figure 3 illustrates the use of Signal Processing Apparatus and Methods at a cable television system "head end" transmission facility that cablecasts	Page 324 lines 18-21.	Fig. 6 illustrates Signal Processing Apparatus and Methods at an intermediate transmission station that is a cable television system "head end" and that cablecasts several channels of television programming.

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Instant Specification		a cable television system head end (such as the head end of Fig. 6).	In example #7, the controller, 20, of the signal processor, 200, of Fig. 4 is preprogrammed at a particular time with particular information that indicates that the subscriber of said station wishes to view said "Wall Street Week" program when transmission of said program on cable cable 13 commences.	Subsequently, but still in the interval between said commence-enabling time and said 8:30 PM time, said program originating studio embeds in the audio portion and transmits a particular SPAM message that consists of a "01" header, execution segment information that matches said enable-WSW- programming information, particular meter-monitor information, particular as the information segment information, and an end of file signal. (Hereinafter said message is called the "1st-WSW-program-enabling-message (#7).")	A SPAM message is the modality whereby the original transmission station that originates said message controls specific addressed apparatus at subscriber stations. The information of any given SPAM transmission consists of a series or stream of sequentially transmitted SPAM messages.	Finally, Fig. 4 shows local input, 225, well known in the art, which has means for generating and transmitting control information to controller, 20, of signal processor, 100. The function of local input, 225, is to provide means whereby a subscriber may input information to the signal processor
	Reference	Page 289 line 14.	Page 289 lines 22-27.	Page 297 lines 20-29.	Page 59 lines 29-33.	Page 288 lines 1-20.
Applicants' Priority U.S. Pat. No. '490	Language	several channels of television programing.	Figure 6 illustrates one possible configuration of equipment in a home or office or other television and/or radio receiving site.	The signals that enable the decrypter/interrupter, 101, to decrypt and/or transfer programing uninterrupted may be enbedded in the programing or may be elsewhere. Signal processor, 100, identifies, evaluates, possibly decrypts, and passes a signal or signals to decrypter/interrupter, 101, either at the time of receipt of such programing or at a delayed time or a combination. The signal or signals instruct decrypter/interrupter, 101, to decrypt the transmission or not to decrypt the transmission or to interrupt the transmission or not to interrupt the transmission. The signal or signals may	also inform decrypter/interrupter, 101, how to decrypt or interrupt the programing if decrypter/ interrupter, 101, is capable of multiple means. The signal or signals may transmit a code or codes necessary for the decryption of the transmission.	They might include forecast data. Signal processor, 200, is always operating and monitors all incoming channels. It can convey such signals to microcomputer, 205, whenever it receives them. TV signal decoder, 203, can also identify such signals but only in the one TV channel transferred
Applicants	Reference		Column 17 lines 49-53.	Column 13 lines 17-32.		Column 17 line 62 to page 18 line 4.
Claim Language of	Instant Application		and a receiver station,	said transmitter station being capable of communicating a processor control signal associated with said one of broadcast programming an cablecast programming,		said receiver station having an input device for inputting subscriber information,

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Claim Language of	Applicant	Applicants' Priority U.S. Pat. No. '490		Instant Specification
Instant Application	Reference	Language	Reference	Language
	Column 13 lines 32-47.	by box, 201, to TV set, 202, and then only when TV set, 202, is on and operating. Decoder, 203, transfers all received signals to processor or monitor, 204, which identifies the signals as addressed to microcomputer, 205, and transfers them to microcomputer, 205.  Figure 4A also shows local input, 102, with means for generating and transmitting signals to signal processor, 00. Local input, 102, is intended to permit a person at a local receiving site that is prevented, by any means, from receiving programing to instruct signal processor, 100, that the site wants to be enabled to receive the programing. Local input, 102, may also serve other purposes. Local input, 102, may convey a continuous signal or an occassional signal or a one-time-only signal.	·	of his subscriber station, thereby controlling the functioning of his personal signal processor system is specific predetermined fashions that are described more fully below. In the preferred embodiment, local input, 225, is actuated by keys that are depressed manually by the subscriber in the fashion of the keys of a so-called touch- tone telephone or the keys of a typewriter (or microcomputer) keyboard. As Fig. 4 shows, microcomputer, 205, also has capacity for inputting control information to microcomputer, 205, via decoder, 203, and in the preferred embodiment, microcomputer, 205, may also automatically substitute for local control, 225, in predetermined fashions in inputting control information to said controller, 20, on the basis of preprogrammed instructions and information previously inputted to said microcomputer, 205.
a processor for storing and processing subscriber data in response to said processor control signal,	Column 8 lines 32-44.	switches or buttons or combinations. It may be a computer acting in a predetermined fashion. The signal may be input to signal processor, 100, as described in Figure 1, at buffer/comparator, 8, or signal processor or monitor, 12, or buffer/comparator, 14.  The controller, 20, can instruct signal decoders, 30 and 40, when, where, and how to look for signal words, which allows signal words to be received in any pattern or patterns. It can instruct buffer/comparator, 8, how to assemble signal words into signal units and join units together for further transfer and how to determine which signals to pass to decrypter, 10. It can tell decrypter, 10, when and how to change decryption patterns, fashions, and techniques. It can tell processor or monitor, 12, how to	Page 298 line 10 to page 299 line 27.	Receiving the "1st-WSW-program enabling-message (#7) causes controller, 20, to execute the aforementioned load and-run-@20 instructions, to load the 1st-stage-enable -WSW- program instructions of the information segment at particular RAM of controller, 20, then to execute the information so loaded as the so-called machine language instructions of one so-called job.  Executing said 1st-stage-enable-WSW-program instructions causes controller, 20, in the predetermined fashion of said

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Claim Language of	Applicant	Applicants' Priority U.S. Pat. No. '490		Instant Specification
Instant Application	Reference		Reference	Language
		determine which signals to pass externally		instructions, to affect a first stage of
		and when and where and how to determine		decrypting the video information of the "Wall
	-	which signals to pass to buffer/comparator,		Street Week" program transmission.
		14.		Automatically, controller, 20, causes the
				control processor, 39J, of decoder, 30, to
	Column 14 lines 54-61.	If signal processor, 112, has been		accept no SPAM message information from
		preprogramed with the signal or signals or		the EOFS valve, 39F. Then automatically,
		if it has been informed of the		controller, 20, selects information of the last
		predetermined fashion for identifying and		three significant digits of the binary
		processing the the needed signal or signals		information of the aforementioned unique
		in the incoming transmission from facility,		digital code at ROM, 21; computes that
		113, for example, where to look for the		particular Q quantity that is 16 less than the
		signals and when and how, signal		product of multiplying the numerical
-		processor, 112, can transfer the signal to		information of said digits times 256 (which is
		decryptor/interruptor, 115.		2 to the 8th power); and selects information of
				those particular sixteen contiguous bit
				locations at the RAM associated with the
				control processor, 39J, of decoder, 30, that
				commence at the first bit location that is said
				Q quantity of bit locations after a particular
				first bit location at said RAM. At the station
				of Fig. 4, the preprogrammed information of
				said sixteen contiguous bit locations is
				decryption cipher key Ba. (In the present
				invention, the preferred method of
				preprogramming subscriber station signal
•				processing apparatus is to preprogram each
				station with all authorized information but to
				vary the locations of the information from
				station to station in accordance with station
				specific information that varies from station to
				stationfor example, in example #7, Ba cipher
				information can be preprogrammed at eight
				different RAM locations and the particular
				location that applies at any given station that
	•			is authorized with such information relates to
				the last three significant digits of the unique
				digital code of said station in the fashion of
				the above Q quantity computation.)
-				Automatically, controller, 20, transfers said
				selected decreptor 224 and causes decreptor
_	_	_		servered decryptor, 247, and causes decryptor,

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Instant Application	Reference	Language	Reference	Language
				224, to commence decrypting any received information, using said key information and selected decryption cipher algorithm B, and outputting decrypted information to matrix switch, 258. Automatically, controller, 20, causes matrix switch, 258, to transfer the information of the aforementioned video output inputted from said tuner, 215, to the output that outputs to decryptor, 224, thereby causing said decryptor, 224, to receive the information of said video portion (said information being, as explained above, encrypted digital video), to decrypted information, and to transfer decrypted information of said video portion to matrix switch, 258.
			In general see, page 279 line 30 to page 280 line 35.	The means and methods of the present invention for regulating reception and use of programming relate, in particular, to three features of the present invention. The computer system of the present invention has capacity at each subscriber station to compute station specific information based on preprogrammed information based on preprogrammed information that exists at each station and that differs from station to station. Given this capacity, any central control station of the present invention that originates a SPAM transmission can cause subscriber station apparatus to decrypt received SPAM information in different fashions with each station decrypting its received information is its own station specific fashion. A central station can cause different stations to compute different station specific decryption cipher keys and/or algorithms to use in any given step of decryption or to compute station specific key and/or algorithm indentification information that differs from station to station and controls each station in identifying the key and/or algorithm to use for any given step of decrypting. A second feature of the present

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Instant Application	Reference	Language	Reference	Language
				invention is that effective SPAM processing depends on the correspondence between the transmitted SPAM information that causes processing at the subscriber stations and the information preprogrammed at the various stations that controls the SPAM processing at each station. In order for any given SPAM execution segment to invoke any given SPAM execution segment to invoke any given station, the received binary information of said segment (for example, "010011") must match preprogrammed controlled-function- invoking information ("010011") at each station. This feature permits each station to be preprogrammed with station specific controlled-function invoking information that differs from station to station (which means that no single SPAM execution segment could invoke a given function at all stations without first being processed at selected stations to render its information to correspond to the station specific preprogrammed invoking information of said stations). The third feature of the present invention is an extended system of means and methods for regulating the reception and use of SPAM information-including decryption key and algorithm information-that is illustrated in Fig. 4 and discussed more fully below.
a communications device for transmitting information to a remote site,	Column 8 lines 20-25.	The signal processor apparatus also has a controller device which includes programable random access memory controller 20, read only memory 21 that may contain a unique digital code capable of identifying the signal processing apparatus uniquely, an automatic dialing device 24, and a telephone unit, 22.	Page 33 lines 7-12.	Signal processor, 26, has a controller device which includes programmable RAM controller, 20; ROM, 21, that may contain unique digital code information capable of identifying signal processor, 26, and the subscriber station of said processor, 26, uniquely; an automatic dialing device 24; and a telephone unit, 22.
			Page 301 lines 6-30.	At each station where a match fails to occur-which indicates that a decryptor, 224, is not decrypting its received information

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Instant Specification	Language	correctly and suggests that the preprogrammed SPAM operating information of said station may have been tampered withnot resulting in a match causes the controller, 20, of said station to cause all information of said 1st-WSW-programenabling-message (#7) to be erased from all memory of said station except for a particular portion of said 1st-stage-enable-WSW-program instructions loaded at the RAM of said controller, 20, then to execute the information of said portion as instructions of a machine language job. Executing said portion causes controller, 20, to cause the auto dialer, 24, and telephone connection, 22, of said station to establish telephone communications with a particular predetermined remote station, in the fashion described above, and causes controller, 20, then to transmit the aforementioned appearance-of-tampering information together with complete information of the unique digital code that identifies said station uniquely. If telephone communications are not established with said remote station in a predetermined fashion and/or within a predetermined fashion and/or within a predetermined fashion and/or within a predetermined fune interval, the instructions of said portion cause said controller, 20, to erase all preprogrammable RAM and EPROM of the signal processing apparatus at said	thereby causing monitor, 202M, to commence receiving said audio information
	Reference		Page 310 lines 6-8
s' Priority U.S. Pat. No. '490	Language		For example, only the video portion of the transmission may be encrypted. The audio
Applicants' Priority	Reference		Column 14 lines 2-9.

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commence displaying, at its television picture

...thereby causing monitor, 202M, to

and lines 22-24.

tube, the information of the transmitted

television image.

signals were placed in the audio portion of unsuitable for satisfactory viewing, if the

the overall transmission.

and emitting sound in accordance with said

portion may remain unencrypted. In such a

and an output device for

program, said method comprising the steps of: displaying a television

circumstance, a connection such as that

shown in Figure 4B could pass

unencrypted signals to signal processor 103, while passing a transmission

audio information.

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Claim Language of	Applicants	Applicants' Priority U.S. Pat. No. '490	393	Instant Specification
Instant Application	Reference	Language	Reference	Language
displaying said television program at said output device;	Column 14 lines 2-9.	See above.	Page 310 lines 6-8	thereby causing monitor, 202M, to commence receiving said audio information and emitting sound in accordance with said audio information.
			and lines 22-24.	thereby causing monitor, 202M, to commence displaying, at its television picture tube, the information of the transmitted television image.
inputting a command at said input device;	Column 13 lines 40-44.	Local input, 102, may convey a continuous signal or an occassional signal or a onetime-only signal. It may be activated by one or more switches or buttons or combinations. It may be a computer acting in a predetermined fashion.	Page 289 line 22 to page 290 line 3.	In example #7, the controller, 20, of the signal processor, 200, of Fig. 4 is preprogrammed at a particular time with particular information that indicates that the subscriber of said station wishes to view said "Wall Street Week" program when transmission of said program on cable cable 13 commences.  (So preprogramming controller, 20, can occur in several fashions. For example, prior to a particular time, a subscriber may enter particular please-fully-enable-WSW-on-CC13-at-particular-8:30 information at local input, 225, and cause said information, in a predetermined fashion, to be inputted to controller, 20, by local input, 225. Alternately, microcomputer, 205, can be preprogrammed with particular specific-WSW information and, in a predetermined fashion that is described more fully below, caused to input said in a predetermined fashion that is described more fully below, caused to input lar-8:30 information to said controller, 20.)
communicating, from said receiver station to said transmitter station,	Column 15 lines 20-25.	In any of the cases illustrated in Figures 4A through 4E, signal processors, 100, 103, 106, 109, and 112, could also operate in a predetermined fashion and telephone a remote site to get an additional signal or signals necessary for the proper decryption and/or transfer of incoming programing transmissions.	Page 311 line 33 to page 312 line 8.	And for example, determining that a local station is not preprogrammed properly and/or that decryption, stripping, and/or signal generating apparatus are not functioning correctly may cause apparatus of said station to perform other steps of disabling and/or communicating-eg., the local apparatus may interrogate remote station apparatus, by telephone, for cipher key and/or cipher algorithm instructions and information.

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Claim Language of	Applicants	Annlicants' Priority II S Pat No. '490		Instant Specification
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an event signal	Column 15 lines 22-23.	See immediately above.	Event: page 311 lines 33-34, and signal: page 312 line 6	And for example, determining that a local station is not preprogrammed properlyinterrogate remote station apparatus, by telephone
			Page 301 lines 14-23.	a particular portion of said 1st-stage-enable-WSW-program instructions loaded at the RAM of said controller, 20, then to execute the information of said portion as instructions of a machine language job. Executing said portion causes controller, 20, to cause the auto dialer, 24, and telephone connection, 22, of said station to establish telephone communications with a particular predetermined remote station, in the fashion described above, and causes controller, 20, then to transmit the aforementioned appearance-of-tampering information together with complete information of the unique digital code that identifies said station uniquely.
based on said command inputted at said receiver station;	Column 13 lines 40-44.	See immediately above.	Page 289 line 22 to page 290 line 3.	See above.
transmitting, from said transmitter station to said receiver station,	Column 15 lines 23-25.	telephone a remote site to get an additional signal or signals necessary for the proper decryption and/or transfer of incoming programing transmissions.	Page 297 lines 20-29.	Subsequently, but still in the interval between said commence-enabling time and said 8:30 PM time, said program originating studio embeds in the audio portion and transmits a particular SPAM message that consists of a "01" header, execution segment information that matches said enable-WSW- programming information, particular meter-monitor information, particular meter-monitor as the information segment information, and an end of file signal. (Hereinafter said message is called the "1st-WSW-program-enabling-message (#7).")
operating instructions associated with said one	Column 5 lines 18-20.	and a programmable random access memory controller ("PRAM controller")	Page 298 lines 14-16.	then to execute the information so loaded as the so-called machine language instructions of

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Claim Language of	Applicants	Applicants' Priority U.S. Pat. No. '490		Instant Specification
Instant Application	Reference	Language	Reference	Language
of broadcast programming and		that permits revision of operating patterns and instructions.		one so-called job.
caoiccast programmig,	and column 9 lines 20-23.	The controller, 20, is interactive with external sources via telephone connection, 22, and can be reprogramed from such remote sources.		
in response to said event signal communicated from said receiver station;	Column 15 lines 20-25.	In any of the cases illustrated in Figures 4A through 4E, signal processors, 100, 103, 106, 109, and 112, could also operate in a predetermined fashion and telephone a remote site to get an additional signal or signals necessary for the proper decryption and/or transfer of incoming programing transmissions	Page 312 lines 6-8.	may interrogate remote station apparatus, by telephone, for cipher key and/or cipher algorithm instructions and information.
one of programming and reprogramming said receiver station, on the basis of said transmitted onerating	Column 5 lines 18-20,	a programmable random access memory controller ("PRAM controller") that permits revision of operating patterns and instructions.	Page 298 lines 6-16.	Executing said instructions causes said control processor, 391, to transfer the information of said message to controller, 20, in the fashion of the local-cable- enabling-message (#7).
instructions,	with column 9 lines 20-23.	The controller, 20,is interactive with external sources via telephone connection, 22, and can be reprogramed from such remote sources.		"1st-WSW-program-enabling-message (#7) causes controller, 20, to execute the aforementioned load- and-run-@20 instructions, to load the 1st-stage-enable-
	Column 8 lines 25-42.	The controller, 20, governs the operation of all operating elements of the apparatus. The controller, 20, inputs the local oscillator, 6, a sequential pattern to select the various channels to be received by switch, 1, and mixers, 2 and 3. This then allows the channels to be diverted to the detectors, receivers, and decoders in any predetermined pattern desired. The controller, 20, can instruct signal decoders, 30 and 40, when, where, and how to look for signal words, which allows signal words to be received in any pattern or patterns. It can instruct buffer/ comparator, 8, how to assemble signal words into signal units and ioin units together for further		w.s.w program instructions of the information segment at particular RAM of controller, 20, then to execute the information so loaded as the so-called machine language instructions of one so-called job.
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		transfer and how to determine which signals to pass to decrypter, 10. It can tell decrypter, 10, when and how to change decryption patterns, fashions, and techniques. It can tell processor or monitor, 12, how to determine which signals to pass externally and when and where and how to determine which signals to pass to buffer/comparator, 14.		
to respond in a predetermined fashion to said processor control signal;	Column 15 lines 1-4.	If signal processor, 112, can identify, processes, and transfer the needed signal or signals, decryptor/interruptor, 115, can decrypt and/or transfer the incoming transmission from box, 114, satisfactorily.	Page 278 lines 30-32.	Said means and methods involve the operation of preprogrammed cipher keys (such as keys J and Z) and cipher algorithms to decrypt transmitted information.
	Column 13 lines 1-9.	Figures 4A through 4E illustrate methods for governing the reception of programing and the use of signal processor apparatus in these methods. All of these methods involve the use of one or more devices, of which various models exist well known in the art, for the decryption of programing transmissions and/or one or more other means for interrupting programing transmissions, also well known in the art, which may be as simple as a switch		
receiving, at said receiver station, said processor control signal;	Column 13 lines 17-32.	The signals that enable the decrypter/interrupter, 101, to decrypt and/or transfer programing uninterrupted may be embedded in the programing or may be elsewhere. Signal processor, 100, identifies, evaluates, possibly decrypts, and passes a signal or signals to decrypter/interrupter, 101, either at the time of receipt of such programing or at a delayed time or a combination. The signal or signals instruct decrypter/interrupter, 101, to decrypt the transmission or not to decrypt the transmission or to interrupt the transmission. The signal or signals may	Page 305 line 30.  Page 226 lines 25-28.	the information inputted from signal generator, 230, When divider, 4, commences transferring the embedded information of said second message to decoder, 203, the binary SPAM information of said message is received at decoder, 203;

Claim Language of	Applicants	s' Priority U.S. Pat. No. '490		Instant Specification
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Column 191	Column 19 lines 14-20.	also inform decrypter/interrupter, 101, how to decrypt or interrupt the programing if decrypter/ interrupter, 101, is capable of multiple means. The signal or signals may transmit a code or codes necessary for the decryption of the transmission.  Microcomputer, 205, instructs signal processor, 200, to pass all program and channel identifiers on all programing being cablecast on the multi-channel system.  Signal processor, 200, receives this instruction from microcomputer, 205, at its processor or monitor, 12, which reacts, in a predetermined fashion by passing also externally to microcomputer, 205, all signals that it passes to buffer/ comparator, 14.		
	Column 14 lines 54-61.	If signal processor, 112, has been preprogramed with the signal or signals or if it has been informed of the predetermined fashion for identifying and processing the the needed signal or signals in the incoming transmission from facility, 113, for example, where to look for the signals and when and how, signal processor, 112, can transfer the signal to decryptor/interruptor, 115.  Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X.	Page 298 lines 16-21.  Page 309 line 27 to page 310 line 3.	Executing said 1st-stage-enable-WSW-program instructions causes controller, 20, in the predetermined fashion of said instructions, to affect a first stage of decrypting the video information of the "Wall Street Week" program transmission.  Determining that signal stripper, 229, and that signal generator, 230, are stripping and inserting correctly (after having determined that that decryptors, 224 and 231, are decrypting correctly) causes the controller, 20, of the station of Fig. 4 (and causes controllers, 20, at other stations where so determining occurs) to execute particular additional 2nd-stage-enable-WSW-program instructions, and executing said instructions causes controller, 20, to cause the apparatus of the station of Fig. 4 to commence transferring the decrypted television information of the "Wall Street Week" program to microcomputer, 205, and monitor, 202M.
causing said receiver Column 15 lines 1-4 station to receive and	lines 1-4.	See above.	Page 294 line 30 to page 295 line 7.	Executing the instructions of said portion causes controller, 20, in the predetermined

ransferring the n of the "Wall computer, 205,	em of the I transmitting Microkey ions where the rst message rr, 205, and ses itted) causes itted) causes ming to ming to is displayed.	0, of the signal rogrammed at information r of said
controller, 20, to cause the apparatus of the station of Fig. 4 to commence transferring the decrypted television information of the "Wall Street Week" program to microcomputer, 205, and monitor, 202M.	Transmitting the instruction, "GRAPHICS ON", to the PC-MicroKey System of the subscriber station of Fig. 3 (and transmitting "GRAPHICS ON" to other PC-MicroKey Systems at other subscriber stations where the program instruction set of the first message has been run at a microcomputer, 205, and where said second message causes "GRAPHICS ON" to be transmitted) causes said PC-MicroKey System to combine the programming of Fig. 1A and of Fig. 1B and transmit the combined programming to monitor, 202M, where Fig. 1C is displayed.	In example #7, the controller, 20, of the signal processor, 200, of Fig. 4 is preprogrammed at a particular time with particular information that indicates that the subscriber of said
page 310 line 3.	Page 236 lines 1-10.	Page 289 line 22 to page 290 line 3.
system, 220, to turn video recorder, 217, on and record "Wall Street Week," and also microcomputer, 205, may instruct switch, 216, to turn TV set, 202, on and tuner, 215, to tune appropriately to "Wall Street Week."	See above.	In another example, microcomputer, 205 may be preinformed that a certain television program, hypothetically "Wall Street Week," should be televised on TV

Instant Specification		fashion of the said portion, to cause selected apparatus of the station of Fig. 4 to receive the cable channel 13 transmission, to cause selected apparatus to decrypt the audio portion of said transmission, to cause selected apparatus to commence waiting to receive further enabling information, and to create a meter record that documents the decryption of the cable audio transmission at the station of Fig. 4. Automatically, controller, 20, causes matrix switch, 258, to cease transferring video and audio information to monitor, 202M.  Then, automatically, controller, 20, causes a selected tuner, 214, to tune to the frequency of cable channel 13,	executing said instructions causes controller, 20, to cause the apparatus of the station of Fig. 4 to commence transferring the decrypted television information of the "Wall Street Week" program to microcomputer, 205, and monitor, 202M.	Transmitting the instruction, "GRAPHICS ON", to the PC-MicroKey System of the subscriber station of Fig. 3 (and transmitting "GRAPHICS ON" to other PC-MicroKey Systems at other subscriber stations where the program instruction set of the first message has been run at a microcomputer, 205, and where said second message causes "GRAPHICS ON" to be transmitted) causes said PC-MicroKey System to combine the programming of Fig. 1A and of Fig. 1B and transmit the combined programming to monitor, 202M, where Fig. 1C is displayed.
	Reference		Page 309 line 34 to page 310 line 3.	Page 236 lines 1-10.
Applicants' Priority U.S. Pat. No. '490		Microcomputer, 205, instructs signal processor, 200, to pass all program and channel identifiers on all programing being cablecast on the multi-channel system. Signal processor, 200, receives this instruction from microcomputer, 205, at its processor or monitor, 12, which reacts, in a predetermined fashion by passing also externally to microcomputer, 205, all signals that it passes to buffer/ comparator, 14. Analyzing these identifier signals in a predetermined fashion, microcomputer, 205, determines that "Wall Street Week" is being televised on channel X. Then, in a predetermined fashion, microcomputer, 205, may instruct tunar, 214, to everitch box	201, to channel X and may instruct control system, 220, to turn video recorder, 217, on and record "Wall Street Week," and also microcomputer, 205, may instruct switch, 216, to turn TV set, 202, on and tuner, 215, to tune appropriately to "Wall Street Week."	See above.
Applicants	Reference	Column 19 lines 12-29.		Column 19 line 63 to column 20 line 2.
Claim Language of	Instant Application	output said one of broadcast programming and cablecast programming in accordance with said processor control signal.		

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Column 19 lines 5-15.

44. The method of claim 43, wherein said

subscriber reaction to command is a

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please-fully-enable-WSW-on-CC13-at-particu lar-8:30 information to said controller, 20.)

Claim Language of	Applicant	Applicants' Priority U.S. Pat. No. '490		Instant Specification
Instant Application	Reference		Reference	Language
said television program.		set, 202, when it is cablecast.  Microcomputer, 205, is preinformed of the time of cablecasting. When that time comes, microcomputer, 205, receives no program identification signals whatever from TV signal decoder, 203, which indicates that the set, 202, is not on.  Microcomputer, 205, instructs signal processor, 200, to pass all program and channel identifiers on all programing being cablecast on the multi-channel system.		station wishes to view said "Wall Street Week" program when transmission of said program on cable cable 13 commences.  (So preprogramming controller, 20, can occur in several fashions. For example, prior to a particular time, a subscriber may enter particular please-fully-enable-WSW-on-CC13-at-particular-8:30 information at local input, 225, and cause said information, in a predetermined fashion, to be inputted to controller, 20, by local input, 225. Alternately, microcomputer, 205, can be preprogrammed with particular specific-WSW information and, in a predetermined fashion that is described more fully below, caused to input said please-fully-enable-WSW-on-CC13-at-particular-8:30 information to said controller, 20.)
45. The method of claim 43, wherein said event signal communicated from said receiver station comprises a customer order for said one of broadcast programming and cablecast programming.	Column 19 lines 5-15.	In another example, microcomputer, 205 may be preinformed that a certain television program, hypothetically "Wall Street Week," should be televised on TV set, 202, when it is cablecast.  Microcomputer, 205, is preinformed of the time of cablecasting. When that time comes, microcomputer, 205, receives no program identification signals whatever from TV signal decoder, 203, which indicates that the set, 202, is not on.  Microcomputer, 205, instructs signal processor, 200, to pass all program and channel identifiers on all programing being cablecast on the multi-channel system.	Page 289 line 22 to page 290 line 3.	In example #7, the controller, 20, of the signal processor, 200, of Fig. 4 is preprogrammed at a particular time with particular information that indicates that the subscriber of said station wishes to view said "Wall Street Week" program when transmission of said program on cable cable 13 commences.  (So preprogramming controller, 20, can occur in several fashions. For example, prior to a particular time, a subscriber may enter particular please-fully-enable-WSW-on-CC13-at-particular-8:30 information at local input, 225, and cause said information, in a predetermined fashion, to be inputted to controller, 20, by local input, 225. Alternately, microcomputer, 205, can be preprogrammed with particular specific-WSW information and, in a predetermined fashion that is described more fully below, caused to input said

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In the interval between said commence-enabling time and said 8:30 PM time, said head end is caused, in a predetermined fashion to transmit a particular	enabling SPAM message that consists of a "01" header, execution segment information that matches said enable-next-program-on-CC13 information, particular meter-monitor information, information segment information of particular enable-CC13 instructions and particular enable-WSW instructions that include particular enable-WSW- programming information, and an end of file signal on the frequency of said master control channel. (Hereinafter said message is called the "local-cable-enabling-message (#7).")	Receiving said message causes controller, 20, to load the enable-CC13 instructions and the enable-WSW instructions of the information segment of said message at particular RAM of controller, 20, and execute said instructions as the machine language instructions of one job.	Resulting in a match causes controller, 20, to execute a particular portion of said enable-CC13 instructions.  Executing the instructions of said portion causes controller, 20, in the predetermined fashion of the said portion, to cause selected apparatus of the station of Fig. 4 to receive the cable channel 13 transmission,	Then, automatically, controller, 20, causes a selected tuner, 214, to tune to the frequency of cable channel 13,
Page 291 lines 9-20.		Page 292 lines 7-11.	Page 294 lines 28-33.	Page 295 lines 6-7.
pass all program and channel identifiers on all programing being cablecast on the multi-channel system.	Then, in a predetermined fashion, microcomputer, 205, may instruct tuner, 214, to switch box, 201, to channel X and may instruct control system, 220,			
Column 19 lines 14-15;	and lines 24-25.			
46. The method of claim 43, wherein said received and processed processor control signal	is an instruct-to-tune signal that causes a receiver to receive a selected transmission.			

In due course, but still before said 8:30 PM	
Page 303 lines 19-23,	
Microcomputer, 205, instructs signal	
Column 19 lines 14-15,	
47. The method of	

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time, said program originating studio commences transmitting analog television information on its transmission frequency and embeds and transmits particular SPAM message information on lines 20, 21, 22, 23, 24, 25, 26, and 27.	(Hereinafter, each of said SPAM messages is called a "2nd- WSW-programenabling-message (#7).")	Executing said additional  2nd-stage-enable-WSW-program instructions at the station of Fig. 7 causes controller, 20, first to cause the apparatus of said station to commence transferring the decrypted television information of the "Wall Street Week" program transmission to decoder, 203, and microcomputer, 205. Automatically, controller, 20, causes matrix switch, 258, to cease inputting the decrypted video information of said transmission to signal processor, 200, (at switch, 1), and to commence transferring said video information	At the station of Fig. 7, executing said additional 2nd-stage-enable-WSW-program instructions causes controller, 20, thereafter to cause the apparatus of said station to determine that monitor, 202M,	Receiving said 202M-is-not-on information causes controller, 20, under control of said additional 2nd-stage- enable-WSW-program instructions,	to switch power on to monitor, 202M,
	and page 304 lines 10- 11.	Page 443 lines 19-28.	Page 444 lines 23-26.	Page 445 lines 6-8,	and lines 24-25.
processor, 200, to pass all program and channel identifiers on all programing being cablecast on the multi-channel system.  Then, in a predetermined fashion, microcomputer, 205, may instruct tuner, 214, to switch box, 201, to channel X and	may instruct control system, 220, to turn video recorder, 217, on and record "Wall Street Week," and also microcomputer, 205, may instruct switch, 216, to turn TV	set, 202, on and tuner, 215, to tune appropriately to "Wall Street Week."			
and lines 27-28.					
claim 43, wherein said received and processed processor control signal is an instruct-to-activate signal that controls a switch or inputs power to an apparatus.	:			-	

Column 19 lines 14-15. Microcomputer, 205, instructs signal Page 303 lines 19-23. processor, 200, to pass all program and channel identifiers on all programing being
Column 19 lines 14-15.

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information on its transmission frequency and	embeds and transmits particular SPAM message information on lines 20, 21, 22, 23, 24, 25, 26, and 27.		(Hereinaffer, each of said SPAM messages is called a "2nd- WSW-program-	enabling-message (#7).")	the controller, 20, of the station of Fig. 4	(and causes controllers, 20, at other stations	where so determining occurs) to execute	particular additional	2nd-stage-enable-WSW-program instructions,	and executing said instructions causes	controller, 20, to cause the apparatus of the	station of Fig. 4 to commence transferring the	decrypted television information of the "Wall	Street Week" program to microcomputer, 205,	and monitor, 202M. Automatically,	controller, 20, causes matrix switch, 258, to	transfer the decrypted audio information	inputted from decryptor, 107, to monitor,	202M, thereby causing monitor, 202M, to	commence receiving said audio information	and emitting sound in accordance with said	audio information.
		10 11: u	Fage 304 lines 10-11.		Page 309 line 30 to	page 310 line 8.																
cablecast on the multi-channel system.	Then, in a predetermined fashion, microcomputer, 205, may instruct tuner.	214, to switch box, 201, to channel X and	may instruct control system, 220, to turn video recorder, 217, on and record "Wall	Street Week," and also microcomputer, 205, may instruct switch, 216, to turn TV	set, 202, on and tuner, 215, to tune	appropriately to "Wall Street Week."																
	Column 19 lines 24-29.						-															
processor control signal	is an instruct-to-enable signal that causes a transfer device to	transfer a signal to said	output device.																			

In the interval between said	commence-enabling time and said 8:30 PM	time, said head end is caused, in a	predetermined fashion, to transmit a particular	enabling SPAM message that consists of a	"01" header, execution segment information	that matches said	enable-next-program-on-CC13 information,	particular meter-monitor information,	information segment information of particular	enable-CC13 instructions and particular	enable-WSW instructions that include	particular enable-WSW-programming
Page 291 lines 9-20.												
Figures 4A through 4E illustrate methods	tor governing the reception of programing	and the use of signal processor apparatus in	these methods.									
Column 13 lines 1-4.												
49. The method of	claim 43, wherein said	received and processed	processor control signal	is an instruct-how-to-	decrypt signal that	controls a decryptor.						

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		information, and an end of file signal on the frequency of said master control channel.  (Hereinafter said message is called the "local-cable-enabling-message (#7).")
Pa	Page 294 lines 30-35.	Executing the instructions of said portion causes controller, 20, in the predetermined fashion of the said portion, to cause selected apparatus of the station of Fig. 4 to receive the cable channel 13 transmission, to cause selected apparatus to decrypt the audio portion of said transmission
Pa pa	Page 295 line 30 to page 296 line 3.	Automatically, controller, 20, selects information of cipher key Ca from among the information of said portion; transfers said cipher key information to decryptor, 107; and causes decryptor, 107, to commence decrypting its received audio information, using said key information and selected decryption cipher algorithm C, and outputting decrypted information of the audio portion of the "Wall Street Week" program transmission

50. The method of	Column 19 line 30;	Co-ordinating Multimedia Presentations in	Page 59 lines 29-33,	A SPAM message is the modality whereby the
claim 43, wherein said		Time	•	original transmission station that originates
received and processed				said message controls specific addressed
processor control signal	and column 19 line 59	Then the host says, "And here is what your		apparatus at subscriber stations. The
is an instruct-to-	to column 20 line 2.	portfolio did." At this point, an instruction		information of any given SPAM transmission
coordinate signal that		signal is generated in the television studio		consists of a series or stream of sequentially
coordinates a		originating the programing and is		transmitted SPAM messages.
multimedia		transmitted in the programing transmission.		
presentation.		This signal is identified by decoder, 203,	with, page 311 lines 10-	with, page 311 lines 10- In due course, at said 8:30 PM time, said
		and transferred via processor, 204, to	16.	program originating studio commences
		microcomputer, 205. This signal instructs		transmitting the programming information of
		microcomputer, 205, to transmit the first		said "Wall Street Week" program, thereby
·		overlay to TV set, 202, for as long as it		causing the apparatus of the station of Fig. 4
		receives the same instruction signal from		(and of other correctly regulated and
		processor, 204. The viewer then sees a		connected stations) to commence functioning
		microcomputer generated graphic of his		in the fashions described above in "One

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Combined Medium" and in examples #1, #2, #3, and #4.	OPERATING SIGNAL PROCESSOR SYSTEMS EXAMPLE #2 In example #2, the first and third messages of the "Wall Street Week" combining are transmitted just as in example #1, but the second message is partially encrypted. The second message conveys the second combining synch command.	At microcomputer, 205, (and at the URS microcomputers, 205, at other stations where the second message of example #2 is decrypted) in the fashion described in example #1, said information, which is the unencrypted binary information of the second combining synch command, executes "GRAPHICS ON" causing microcomputer, 205, to combine the programming of Fig. 1A and of Fig. 1B and transmit said combined programming to monitor, 202M, where Fig. 1C is displayed.	(Hereinafter, an instruction such as the above signal of "GRAPHICS ON" that causes subscriber station apparatus to execute a combining operation in synchronization is called a "combining synch command."
	Page 143 lines 6-11.	Page 151 lines 26-33.	Page 26 lines 20-23.
own stocks' performance overlay the studio generated graphic.			

he				u						<u> </u>
A SPAM message is the modality whereby the	original transmission station that originates	said message controls specific addressed	apparatus at subscriber stations. The	information of any given SPAM transmission	consists of a series or stream of sequentially	transmitted SPAM messages.		In due course, at said 8:30 PM time, said	program originating studio commences	transmitting the programming information of
Page 59 lines 29-33,								with page 311 lines 10-	16.	
Column 19 lines 45-50. When the "Wall Street Week" transmission Page 59 lines 29-33,	begins at 8:30 PM on a Friday evening,	several instruction signals are identified by	decoder, 203, and transferred to	microcomputer, 205. These signals instruct	microcomputer, 205, to generate several	graphic video overlays, which	microcomputer, 205, has the means to	generate and transmit and TV set, 202, has	the means to receive and display, and to	transmit these overlays to TV set, 202,
Column 19 lines 45-50										
	claim 43, wherein said	received and processed	processor control signal	is an instruct-to-	generate signal that	generates information				

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said "Wall Street Week" program, thereby causing the apparatus of the station of Fig. 4 (and of other correctly regulated and connected stations) to commence functioning in the fashions described above in "One Combined Medium" and in examples #1, #2, #3, and #4.	OPERATING SIGNAL PROCESSOR SYSTEMS EXAMPLE #4 In example #4, the first and second messages are both partially encrypted, and the combining of Fig. 1A and Fig. 1B information occurs only at selected subscriber stations where the information of said messages causes decrypting and collecting of meter information as well as combining.	As described in "One Combined Medium" above, running said program instruction set causes microcomputer, 205, (and URS microcomputers, 205, at other subscriber stations) to place appropriate Fig. 1A image information at particular video RAM	TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.	Then the host says, "And here is what your portfolio did."	TV monitor, 202M, then displays the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.
	Page 197 lines 11-16.	Page 221 lines 28-32,	with page 26 lines 8-11.	Page 25 lines 33-34;	with column 26 lines 8-10.
upon command.				Then the host says, "And here is what your portfolio did."	The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.
				Column 19 lines 59-60,	and, column 19 line 67 to column 20 line 1.
				that supplements said on of broadcast programming and	cablecast programming.

original transmission station that originates		begins at 8:30 PM on a Friday evening,		claim 43, wherein said
A SPAM message is the modality whereby the	Page 59 lines 29-33,	When the "Wall Street Week" transmission   Page 59 lines 29-33,	Column 19 lines 45-50 V	52. The method of

Instant Specification	Language	•	said message controls specific addressed apparatus at subscriber stations. The information of any given SPAM transmission consists of a series or stream of sequentially transmitted SPAM messages.  In due course, at said 8:30 PM time, said program originating studio commences transmitting the programming information of said "Wall Street Week" program, thereby causing the apparatus of the station of Fig. 4 (and of other correctly regulated and connected stations) to commence functioning in the fashions described above in "One Combined Medium" and in examples #1, #2, #3, and #4.	OPERATING SIGNAL PROCESSOR SYSTEMS EXAMPLE #4 In example #4, the first and second messages are both partially encrypted, and the combining of Fig. 1A and Fig. 1B information occurs only at selected subscriber stations where the information of said messages causes decrypting and collecting of meter information as well as combining.	As described in "One Combined Medium" above, running said program instruction set causes microcomputer, 205, (and URS microcomputers, 205, at other subscriber stations) to place appropriate Fig. 1A image information at particular video RAM	TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic.
A	Reference		with page 311 lines 10- 16.	Page 197 lines 11-16.	Page 221 lines 28-32,	with page 26 lines 8-11.
Applicants' Priority U.S. Pat. No. '490	Language		several instruction signals are identified by decoder, 203, and transferred to microcomputer, 205. These signals instruct microcomputer, 205, to generate several graphic video overlays, which microcomputer, 205, has the means to generate and transmit and TV set, 202, has the means to receive and display, and to transmit these overlays to TV set, 202, upon command.  The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic.			
Applicants	Reference		Column 19 line 67 to column 20 line 2.			
Claim Language of	Instant Application		received and processed processor control signal is an instruct-to-generate signal that generates information that completes said programming.			

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